Lectures
ON THE
PHYSIOLOGICAL PATHOLOGY OF THE BRAIN.

Delivered at the Royal College of Physicians of London, July, 1876,

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LECTURE II.—PART II.

ON PARALYSIS LIMITED TO A LIMB OR TO SOME MUSCLES.

Facts showing that a lesion of either the anterior, the middle, or the posterior parts, or of the whole of the corpus striatum, can produce paralysis limited to the arm, and that a lesion of the same ganglion can produce paralysis limited to the leg—Facts showing that a simultaneous lesion of the optic thalamus and of the corpus striatum can produce paralysis limited either to the arm or to the leg—Facts showing that a lesion of the middle lobe in most various parts, and also a lesion of the convolutions in either the anterior, the middle, or the posterior lobes, can produce paralysis limited to either the arm or the leg—Remarks about many facts contrary to the supposition that there are parts deserving the name of psycho-motor centres in the surface of the brain.

I HAVE shown that the anterior and the posterior lobes of the brain and the optic thalamus have the power, when irritated by disease, to produce a paralysis limited to the leg or to the arm, as well, although not so frequently, as a paralysis of both the leg and the arm—i.e., hemiplegia. I will now show that it is so for almost all the other parts of the brain.

4. *A lesion of the corpus striatum can give rise to paralysis of the arm, or of the leg, alone.*—According to the views of Saucerotte and others, the seat of the will power for the movements of the leg is in the corpus striatum and in parts of the brain in front of that ganglion. The facts are very numerous, however, that show that a paralysis of the arm alone, instead of a paralysis of the leg, will appear in cases of disease of the corpus striatum. Lerminier[1] gives a case of hæmorrhage in the left corpus striatum, which caused paralysis only in the right arm. Védie[2] relates a case in which the left arm remained alone paralysed after having been for a time more paralysed than the leg, the cause of this local loss of power being a hæmorrhage in the right corpus striatum. In two cases of hæmorrhage in the corpus striatum Serres found a paralysis of the arm, only or chiefly. In one of these cases[3] there was only weakness, with trembling of the right arm. In the other[4] there was complete paralysis of the left arm, with incomplete paralysis of the left leg. In a case of Rochoux[5] a paralysis of the left arm occurred after an attack of apoplexy, and lasted three or four months. The lesion having caused it was a hæmorrhage in the right corpus striatum, in which a cavity, of more than one inch in diameter, and full of fluid, was found. Gintrac[6] has seen a case of hæmorrhage in the external and posterior part of the right corpus striatum, which had produced at first hemiplegia, but very soon only paralysis of the left arm, no trace remaining of the paralysis of the left leg.

Softening of the corpus striatum, as well as hæmorrhage in that ganglion, can give rise to paralysis of the arm alone. In a case of considerable ramollissement of the left corpus striatum and of the neighbouring medullary substance, Lallemand[7] found the right arm alone affected with paralysis. Jarrin[8] records a case of inflammatory softening of the right corpus striatum and of the white substance of the middle lobe, with a paralysis of the left arm. Chomel[9] gives a case in which two tumours pressing on the left corpus striatum produced paralysis only of the right arm.

In cases of disease of the corpus striatum, as well as of disease in any other part of the brain, excepting, perhaps, the pons Varolii and the cerebellum, there is much more frequently a paralysis of the arm than of the leg alone. Still there are some cases of a lesion either in the corpus striatum or close to it having caused only or chiefly hemiparaplegia. Lediberder[10] found capillary apoplexy and softening in the cerebral tissue adjoining the right corpus striatum, in a patient who had a paralysis of only the left lower limb. Romberg[11] gives a case of paralysis of the left leg caused by hæmorrhage in the right corpus striatum and the neighbouring tissue. Stiebel[12] found only paresis of the left leg in a case of tumour in the corpus striatum; but there was another tumour on the surface of the brain (seat not specified). My late friend, Prof. J. H. Bennett,[13] in a case in which the right corpus striatum was very much softened and flattened, the ramollissement extending to the neighbouring tissue, found that after some time the patient, who had been attacked with an incomplete left hemiplegia, recovered motion in the face and arm, but had some paralysis remaining in his foot.

The corpus striatum having been considered by very able physiologists, and especially by Dr. R. B. Todd and Prof. W. B. Carpenter, as a motor centre for both the arm and the leg, it might be asked if, in the cases I have just mentioned, the lesion did not occupy a certain part of the corpus striatum when there was paralysis of the arm alone and another part when the leg was palsied. It was clearly not so, as, on the one hand, in some of those cases the whole corpus striatum was diseased, and, on the other hand, in the cases of hæmorrhage having produced paralysis of the arm only the lesion existed sometimes in the anterior part (as in Lerminier's case), sometimes in the central part (as in Védie's case), and sometimes in the posterior part (as in one of Serres' cases). It is certain, therefore, that the corpus striatum has the power of producing paralysis in both upper and lower limbs; that it can produce a loss of power in one limb alone, and that either the arm or the leg; and, as I will show hereafter, it is certain also that it can be destroyed without paralysis of either limb. So that—and I will insist on this in another lecture—there is no doubt that the corpus striatum is not a centre for the voluntary movements of both the upper and the lower limbs or of either of them. If we find that disease in that cerebral ganglion often produces hemiplegia and sometimes paralysis of one limb, this is not, as is so universally admitted, owing to the loss of function of that nervous centre when altered by disease, but, as I will show hereafter, to an irritation producing on distant parts an inhibitory influence.

5. *A lesion of both the corpus striatum and optic thalamus can give rise to paralysis of the arm, or of the leg, alone.*—What I have shown as regards a lesion of the optic thalamus, or of the corpus striatum, I can show also as regards a lesion existing simultaneously in both these ganglions. In a case of Lallemand's,[14] there was complete paralysis of the right arm caused by softening of several parts of the left optic thalamus and corpus striatum, and also of the pons Varolii. Softening of the whole of the left optic thalamus and of the left corpus striatum, in a case of Cruveilhier's,[15] caused complete paralysis of the arm, and incomplete of the leg. In a case of Dufour's,[16] there was only an incomplete paralysis of the left arm, produced by pressure upon the right optic thalamus and corpus striatum by an enormous tubercle.

Cases of paralysis only or chiefly of the leg, due to disease of both the corpus striatum and the optic thalamus, are not numerous. A clear one was published first by Lacrampe-

1 Annuaire Médico-Chirurgical (Paris, 1819), p. 218.
2 Annales Médico-Psychologiques, 5ème série, vol. xi., Mai 1874, p. 345.
3 Revue Médicale, 1826, vol. i., p. 419.
4 Quotation of Gintrac, loc. cit., vol. vii., p. 156.
5 Recherches sur l'Apoplexie, 2nde édit., p. 32.
6 Loc. cit., vol. vii., p. 155.
7 Loc. cit., vol. i., p. 11.
8 Gazette Médicale de Paris (1833), p. 835.
9 Clinique de l'Hôtel Dieu, Gazette des Hôpitaux, Mars, 1842, quoted by Ladame, loc. cit., p. 176.
10 Quoted by Rendu, Recherches Clin. et Anat. sur les Paralysies liées à la Méningite Tubercul. (Paris, 1874), p. 21.
11 Treatise on Nervous Diseases, translated by Dr. Sieveking (Sydenham Soc.), vol. ii., p. 424.
12 Quoted by Ladame, p. 177.
13 Pathological and Histological Researches on Inflammation of the Nervous System (Edinburgh, 1843), p. 7. (Reprinted from the Medical and Surgical Journal.)
14 Loc. cit., vol. i., p. 47.
15 Quoted by Lallemand, loc. cit., vol. i., p. 106, footnote.
16 Archives Gén. de Méd., &c. vol. xvii., 1817, p. 243.

Loustau,[17] and afterwards by Serres,[18] under whose care the patient had been. The left leg in that case was completely paralysed, and the arm incompletely. Two hæmorrhagic cavities were found, one in the right corpus striatum, the other in the right optic thalamus, the depression being deeper in the first than in the second of those organs. The tissue around these depressions was yellowish.

6. *A lesion of the middle lobe of the brain can give rise to paralysis of the arm, or of the leg, alone.*—I speak of the middle lobe, being of course fully aware that it is considered by the localisers of our day as containing the so-called psycho-motor centres for the lower limb, and some parts of those for the upper limb. But the cases I select to show that a lesion of the middle lobe can produce paralysis of the arm or of the leg alone, are such that either it cannot be supposed that those pretended centres had been in any way altered, or if they were altered the alteration was not limited to centres for the arm only, or to those of the leg only.

As regards paralysis limited to the upper limb, cases abound in which the middle lobe was the seat of the lesion. I will hastily mention a number of them. Hervey[19] has recorded a case of softening of the left island of Reil, and of the neighbouring marginal convolution, with paralysis of the right arm. In this case the disease was neither in a motor centre, nor in any part of the supposed motor track. Bernhardt[20] found paralysis limited to the left arm and face in a case of aneurism of the right carotid artery at the base of the brain. Lerminier[21] found the left arm alone paralysed in a case in which there was a large quantity of serosity (two ounces and a half) in the right ventricle. The same observer[22] found also a paralysis only of the left arm in a case in which a hæmorrhage had taken place behind and above the right lateral ventricle—a part where the fibres connecting the pretended psycho-motor centre with the base of the brain must have been destroyed or injured. Bouillaud,[23] in a case of hæmorrhage in the left middle lobe in its posterior part—the cyst extending from the surface to the lateral ventricle,—found only a paralysis of the right arm, although the pretended psycho-motor centre for the leg and its connexions with the base of the brain must have been at least considerably injured. Desruelles[24] found a large cyst on the side of the right middle lobe in a case in which the left arm alone had been paralysed. In a case of Lallemand[25] the left arm only was paralysed, from a considerable destruction of tissue (by an abscess three inches in diameter) in the lateral part of the right middle lobe. O'Halloran[26] has recorded a case of traumatic injury of the right half of the brain in which, although a considerable amount of substance of the anterior and middle lobes of the brain was lost, there was only paralysis of the arm for two days. Dan de la Vauterie,[27] in a case of paralysis of the left arm, found that there was blood effused in the centre of the right hemisphere, the cerebral tissue, two or three inches around the blood, being hard and red. In two cases of cancer of the right middle lobe, one published by Berthol,[28] the other by Montault,[29] there was paralysis only of the left arm.

Cases of paralysis only of the leg, due to disease of the middle lobe, are by far less frequent than cases of palsy limited to the arm. In an interesting case of Abercrombie's[30] the right leg was suddenly paralysed, and remained so for a time, the lesion being a softening of about an inch and a half of the white substance of the left middle lobe, near the lateral ventricle. In a case of abscess, containing three ounces of pus in the middle of the right hemisphere, Vaidy[31] found that the left leg was suddenly attacked with paralysis, but hemiplegia appeared the next day. Bricheteau,[32] in a case of hæmorrhage on the surface of the left middle lobe, where a cyst was formed, thirteen centimetres long, found at the time of the first apoplectic attack (the patient had two attacks, the second due to a hæmorrhage in the cyst already formed) that the right leg was completely without motion, while the right arm was only weak. No one can imagine that a pressure exerted on such a large surface as in this case can have acted only, or almost only, on the small part considered as the pretended psycho-motor centre for the leg. But I will not insist now on what relates to the localisation of special centres of movement of the leg or arm in the middle lobe, as I will have to discuss fully that question in another lecture. My object now in showing that a paralysis of the arm or of the leg only, can be due to a lesion in various parts of the middle lobe, is to show that paralysis does not appear from the loss of a function in the part found diseased. It seems quite clear that, on the one hand, the variety of seats of the lesion in the cases I have mentioned of paralysis of the arm only, and, on the other hand, the similarity of the seat of lesions producing in one case a paralysis of the arm and in another case a paralysis of the leg, prove that we cannot consider a loss of function of the diseased part as the cause of paralysis.

7. *A lesion of the convolutions of the brain in the anterior, middle, or the posterior lobes may give rise to paralysis of the arm, or of the leg, alone.*—No part of the brain has more power than the convolutions to produce a paralysis limited to the arm. I will only give now a small number of the cases showing that a lesion of some convolutions in either of the three lobes can give rise to paralysis of the upper limb. I will make use of other cases when I come to study at full length the paralytic effects of disease of the convolutions, comparing them, as I intend to do, with the convulsive effects of lesions of those parts.

The first case I will mention is extremely important; first, because it is due to a most accurate observer, Prof. Charcot[33]; and, secondly, because it is quite decisive against the views of contemporary localisers. In that case the left arm alone was paralysed, and there was a very considerable atrophy, and even the absence, of convolutions from the right fissure of Rolando to the occipital lobe. Only a part of the pretended psycho-motor centre for the arm was destroyed or altered, and the whole of the pretended centre for the leg was destroyed, so that if the views of the localisers had been right, instead of what was observed there should have existed a complete paralysis of the leg and an incomplete paralysis of the arm. Dr. Dieulafoy[34] has seen a case of lesion of the surface of the brain in appearance favourable to localisers. In a patient who gradually but quickly lost completely the power of moving the right arm he found a clot, the size of a filbert, imbedded in the internal part of the convolution forming the anterior border of the left fissure of Rolando. The case would be most favourable to localisers if it were not that the paralysis was complete, while the lesion destroyed only a part of the pretended motor centre, and if it were not also that there was a complete paralysis of the face, while the lesion was very far from the supposed centre for the movements of the face. Gerhardt,[35] in a case of grey-reddish softening of the left parietal convolutions near the posterior lobe, found that the right arm and the right eyelid elevator were alone paralysed. Troisier,[36] in a case of cerebral meningitis, chiefly on the left side, found the posterior marginal convolution and other convolutions behind that one adherent to the meninges and the seat of capillary apoplexy. The patient had no paralysis except of the right arm and the left side of the face (altern paralysis). Dechambre[37] found one of the right convolutions hardened, slightly enlarged, and with brown-red points, in a case of paralysis of the left arm. In an important case of Durand-Fardel's[38] there was only paralysis of the left arm, notwithstanding a considerable alteration of the convolutions of

17 Revue Médicale, vol. i. 1824, p. 427.
18 Traité d'Anat. comparée du Cerveau, vol. ii., p. 684.
19 Quoted by Rendu, Recherches sur les Paralysies liées à la Méningite Tuberculeuse (Paris), 1874, p. 150.
20 Quoted by Lépine, Localisation dans les Maladies Cérébrales (Paris, 1875), p. 45.
21 Annuaire Médico-Chirurgical (Paris, 1819), p. 216. Lerminier gives also a case in which, besides dropsy of the right lateral ventricle, there was a cyst in the right corpus striatum, and no paralysis except in the left arm (p. 218).
22 Loc. cit., p. 213.
23 Traité de l'Encéphalite (Paris, 1825), p. 76.
24 Quoted by Gintrac, loc. cit., vol. vii., p. 15.
25 Loc. cit., vol. i., p. 414.
26 Quoted by Abercrombie, loc. cit., p. 273.
27 Quoted by Lallemand, loc. cit., vol. i., p. 32.
28 Bulletins de la Société Anatomique (Paris, 1855), p. 328.
29 Journal Universel et Hebdomadaire de Médecine, &c., 1831, vol. ii., p. 314.
30 Loc. cit., p. 50.
31 Quoted by Gintrac, loc. cit., vol. viii., p. 260.
32 Quoted by Gintrac, loc. cit., vol. vi., p. 693.
33 In Cotard, Atrophie du Cerveau, Thèse No. 207 (Paris, 1868), p. 21.
34 Gazette des Hôpitaux (Paris, 1868), p. 150; quoted by Gintrac, loc. cit., vol. vii., p. 4.
35 In Havem's Revue des Sciences Médicales, vol viii. (1876), p. 633.
36 Bulletins de la Société Anatomique, vol. xlvii. (1872), p. 262.
37 Gazette Médicale (Paris, 1838), p. 310.
38 Traité du Ramollissement du Cerveau, p. 31, reproduced by Gintrac, loc. cit., vol. viii., p. 230.

the right middle lobe and a softening of all the other convolutions and also of the medullary substance of that hemisphere. In a case of Lallemand's[39] there was an intermittent paralysis of the right arm from a necrosis of the left half of the frontal bone, with hardening of the convolutions of the left anterior lobe. Demongeot de Confevron[40] gives a case of tubercular meningitis in which the convolutions of the posterior extremity of the right hemisphere were the seat of capillary apoplexy, having produced paralysis only of the left arm.

The facts I have last mentioned clearly show that a lesion of the posterior or of the middle lobes, as well as a lesion of the anterior lobe, can give rise to paralysis of the arm alone. Cases of paralysis of the leg, even when the lesion is on the surface of the middle lobe—which is supposed to contain the so-called psycho-motor centre for the leg,—are not frequently observed in connexion with disease of, or an injury to, the convolutions. The case of Brichetean, which I mentioned a moment ago, is an instance of considerable pressure on the convolutions of, at least, the middle lobe, causing paralysis in the leg only, for a long time. Saucerotte[41] has recorded a remarkable case, in which the left leg was completely paralysed, while the arm was only incompletely palsied, although the whole surface of the right hemisphere was diseased, the part under the frontal bone more so than the rest. Andral,[42] in a case in which the right leg was paralysed before the right arm, found an infiltration of pus over the surface of the whole brain, and an inflammatory state of several convolutions of the left hemisphere near the median line.

It is clear, from all the facts I have mentioned relating to the convolutions of the brain, that paralysis caused by disease of, or an injury to, those parts cannot be considered as due to the loss of their function.

Clinical Lecture
ON
THE TREATMENT OF EMPYEMATA.

Delivered at the Westminster Hospital on Oct. 27th, 1876.

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GENTLEMEN,—By the kind permission of Dr. Sturges I have recently had two cases of empyema in the wards, to which I would draw your attention this afternoon.

The first case is that of J. P——, aged seven, admitted into Burdett ward on July 28th, 1876. The account I obtained of him was that seven weeks ago, after playing in the park during the day, he was seized in the middle of the night with a sharp pain in the right side, causing him to scream out. He began to be sick, and he continued so for two days. His skin became hot, and he had a distressing cough. He was attended by a doctor, who sent him in on July 28th, stating he had pleuro-pneumonia, and that he suspected fluid in the right pleural cavity. On admission there was considerable bulging of the right side. Percussion anteriorly revealed resonance all over both sides; posteriorly, left side, impaired resonance; right side, absolute dulness below angle of scapula, loss of resonance above this for two inches. On auscultation very exaggerated breathing was found anteriorly. Posteriorly, small moist sounds over the whole of the left side. On the right side vesicular murmur, very indistinct below. Moist sounds audible. Voice somewhat bleating.

July 31st: Sixteen and a half ounces of thick, sweet-smelling fluid withdrawn by aspirator, the last drachm or so faintly blood coloured.—August 1st: The breathing much easier; cough very distressing, with profuse expectoration.—7th: The cough has been increasing in severity, the breathing becoming more and more distressed, and evident bulging on right side. Right side of chest resonant down to the sixth rib in front, with good vesicular breathing. Posteriorly, good resonance to spine of scapula, impaired down to angle, dull below. Good vesicular breathing over upper third of chest; very feeble breathing over dull region; veins over affected side enlarged; left side dull up to angle of scapula. Paracentesis performed, and about a pint of sweet pus evacuated; drainage-tube introduced.—10th: Has had very little sleep the last two nights; breath very short; tongue moist and furred; left chest dull to midway between angle and spine of scapula; feeble breathing. Right chest resonant down to lower opening. Hardly any discharge.—11th: No discharge. Pulse 148; respiration 56. Still has very little

From Aug. 17th till Sept. 12th there was generally an evening rise, probably due to the chronic pneumonia of the left lung; but after the latter date the temperature became normal.

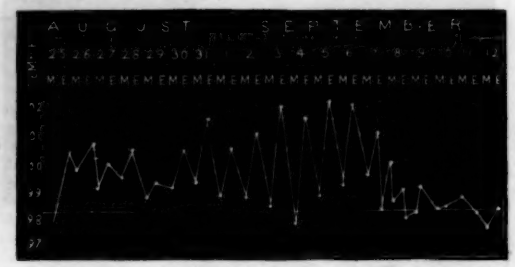
sleep; no appetite; appears more comfortable.—12th: Just a trace of discharge. Had a very fair night. Good resonance all over right side of chest, with vesicular breathing and moist sounds; less dulness on left side, and more air entering. No appetite.—15th: Has been going on famously the last three days. About half an ounce of sweet pus discharged daily. Eats and drinks well.—18th: His mother came and saw him on the 16th, bringing apples, &c., probable cause of temperature going up, as there was no other unfavourable symptom; the bowels were confined, and this might also have assisted in causing the elevation.—21st: Urine, sp. gr. 1019, acid, no albumen, loaded with phosphates; a little discharge from wound; mucous râles over right base.—25th: Tube removed, fifteenth day after operation.—28th: No discharge, except a few drops of pus from the wound. Good resonance and respiratory murmur over right side. Improved resonance over left back, percussion note high-pitched. In left interscapular region dulness, amphoric breathing, abundant râles; no cough; appetite good.—Sept. 4th: Openings closed some days; good breathing and resonance over right chest; left side less râle, improved resonance. Child gets up daily.—15th: *In statû quo.* Discharged to go to a convalescent home. Fairly well.

CASE 2.—W. P——, aged four years and a half, a miserable-looking, wasted, and very anæmic child, was admitted into Hallett ward on Aug. 25th. It was stated that the child had been ill six weeks, and that he sweated a good deal during sleep. On examination, the heart's impulse was seen to be in the fifth interspace, half an inch outside the nipple line; impaired resonance in left apex posteriorly, good resonance over rest of lung, good breathing all over that side, a little crackling opposite the angle of the scapula. Right lung posteriorly: Loss of resonance above spine of scapula, absolutely dull below. In front, marked cracked-pot sound under clavicle; posteriorly, bronchial breathing all over; anteriorly and laterally, no air enters chest. Ordered syrup of iodide of iron, and to be carefully fed, in order to have an opportunity of watching his temperature and to see if the effusion would clear up without operative procedure.

Aug. 28th: Increased amount of resonance over supra-spinous fossa and interscapular regions on right side; more air entering, a little creaking at angle of scapula, friction and more respiratory movement; crackling râles over left base; takes food well. Tincture of iodine, half an ounce, to an ounce and a half of water, to be painted all over the affected side night and morning.—29th: Ordered

[39] Loc. cit., vol. ii., p. 407. [40] Quoted by Rendu, loc. cit., p. 83.
[41] Quoted by Bouillaud, loc. cit., p. 12. [42] Loc. cit., vol. v., p. 41.

cod-liver oil as well as syrup of iodide of iron.—Sept. 1st: Dulness remains unaltered; posteriorly, on right side, there are crackling sounds to be heard, resembling mucous râles; abundant mucous râles over left back. Hypodermic syringe introduced and pus withdrawn from right pleural cavity; the aspirator was then used, and three ounces of sweet, thick pus drawn off.—7th: Some resonance down to base of lung, along the right of the spine. Bronchial breathing posteriorly. No breath-sounds anteriorly below third rib. Good vesicular breathing over left side. At 4 P.M., counter opening made, and drainage-tube introduced under carbolic spray. Four or five ounces of sweet pus with a few flakes of lymph escaped. At 8 P.M. thin pus had soaked through the dressing, so a fresh one was applied under the spray, and this remained until the following morning (8th), at 11 A.M., when another dressing was required; the discharge still purulent, but less in quantity. 2 P.M., again dressed.—Sept. 9th: Dressed, as



After Sept. 12th the temperature only rose once above 100°, and remained about normal till the patient was discharged.

before, at 1 P.M.—10th: Dressed at 7 A.M., as fluid had soaked through, and another dressing was required at 9.30 P.M., the discharge having somewhat increased, but having become sero-purulent.—11th: Dressed at noon.—12th: Dressed at noon. Discharge much less and serous. No other dressing was required till the 14th. Openings dressed on 15th and 16th; on the latter day discharge almost entirely ceased, serous in character, with a slight amount of pus from the wound.—19th: The child has gone on uninterruptedly well. Drainage-tube removed twelve days after the operation. Air entering lung down to openings. Indifferent resonance. The wounds have not been dressed for three days, and yet there is hardly any discharge, and what there is is perfectly sweet. The only trouble the child has now is occasional sickness. The dressing applied on the 19th was removed on the 22nd, and the antiseptic treatment discontinued, the wounds being dressed with a little zinc ointment.—22nd: As soon as the tube was removed the sickness ceased. Child looking wonderfully well. His appetite, which before the operation was very capricious, improved rapidly after it, and he now takes minced chop, two pints of milk, beef-tea and an egg. Indifferent resonance at right base. Air entering all over. Curious whirring rhonchi.—Oct. 3rd: Child running about quite well. On the right side resonance improved, but still indifferent. Loud rhonchi. Has gained three-quarters of a pound in weight in a week.—17th: Good resonance over right side, with fair but rather coarse breathing.—24th: Attended as an out-patient. Cyrtometric tracing taken, which showed no shrinking on the affected side. Good resonance and vesicular breathing.

To-day I will confine my remarks to the treatment of empyema, and I hope on some future occasions to enter more fully into the diagnosis and treatment of pleuritic effusions in general.

The first thing to be considered is, how are we to diagnosticate an empyema from a serous effusion? In the majority of cases the temperature, with the general symptoms of hectic, are sufficiently marked to enable us to arrive at a correct conclusion; in the temperature charts, which I hand round, you will see the characteristic high evening temperature, with the comparatively low morning temperature; and it must be borne in mind that, owing to the rapid way in which cell-formation goes on in children, pleuritic effusions in them are particularly liable to become purulent; and the same may be said of effusions taking place after scarlet fever and measles. Attempts have been made to distinguish between serous and purulent effusions by the physical signs, and it has been asserted that there is a greater loss of vocal resonance and breathing sounds in the latter as compared with the former. However, we need be under no doubt as to the nature of the effusion, as we possess a very ready method of settling the question by puncturing the chest with an ordinary hypodermic syringe, and drawing off some of the contents of the pleural cavity for examination. This simple operation is so easily done, causes so little pain and alarm to the patient, and is, moreover, so innocuous, even if there be solid lung instead of fluid, that we need never fear having recourse to it.

And now as to the treatment of empyemata. All authorities, even those most averse to thoracentesis, now admit that in cases of purulent effusion no other treatment except paracentesis is of any avail, and this should be done as soon as the nature of the effusion is made out. The chest may be tapped either with an aspirator or with the ordinary flat trocar and cannula; and here I may remark that, owing to the thick nature of the fluid and the likelihood of there being flakes of lymph in it, the aspirator is apt to become blocked, and is therefore not nearly so useful as in cases of serous effusion. After the fluid has been evacuated the opening may be sealed up with a piece of lint steeped in carbolic-acid lotion or collodion, in the hope that the fluid will not reaccumulate; but, as in my first case, this hope is generally delusive. I know, however, of one instance in which, after a single paracentesis, pus escaped into the bronchi, was discharged by the mouth, and the patient made a good recovery. If there be only a small amount of pus secreted, a second paracentesis and sealing up of the opening is recommended by some physicians; but, from my own experience, I am convinced that if pus is secreted after one paracentesis it is useless to tinker with the patient, and the only treatment of any avail is to pass a drainage-tube through an opening in the front of the chest to the back, taking care that the posterior opening is at the lowest part of the chest, so as to ensure the perfect discharge of all pus as soon as formed. This was done in my first case, and, as we have seen, with the best results. Immediately after the operation the temperature rose and was very high for two days, then it was nearly normal for some days, the next rise being apparently due to gastric disturbance. In this case convalescence was protracted, owing to chronic pneumonia going on to phthisis in the other lung; yet, in spite of this untoward complication, I was able to remove the tube on the fifteenth day after the operation, and, so far as the empyema was concerned, the child was well three or four days later. After the tube has been passed through the chest and the ends firmly secured, all that remains to be done is to envelop the side in picked oakum, which requires to be renewed whenever the discharge soaks through. I have found that the oakum answers admirably in preventing decomposition going on in the pleural cavity. This constituted my treatment till I admitted my last case, when, acting at the suggestion of Mr. Cane, our energetic house-physician, I determined to have the operation done with the precautions adopted by Lister in his antiseptic system. Accordingly the house-surgeon, Mr. Poynder, passed the drainage-tube very skilfully through the chest under a cloud of carbolic spray, and Mr. Cane afterwards dressed the case with the greatest assiduity, and the result was, as you have already heard from my notes, most successful. On glancing at the temperature-chart, you will see that there was an immediate cessation of the high evening rise, and that from the second day the temperature was nearly normal, and on the twelfth day I was able to remove the tube. When we consider the wretched condition the child was in on admission, I think it must be granted that no other treatment would show so good a result. My advice is, therefore, in all cases of empyema when pus re-accumulates after one thoracentesis, to pass a drainage-tube through, and, if possible, with the adoption of the antiseptic treatment. This plan you will find much more successful than repeated tappings, or than being content with one opening, as in this case it is quite impossible for the pus to escape freely, owing to the opening being some distance above the diaphragm. I have seen patients months under treatment in this condition, all sorts of astringent injections tried but without success; and in one instance I reported in THE

LANCET some years ago, of a fistulous empyema of seven months' duration, a drainage-tube was introduced, and after being in a month, the discharge ceased, and the patient made a complete recovery. Some surgeons suggest repeated tappings so as to draw off a small quantity of pus at a time, in order to allow the lung to expand gradually; but no plan of treatment, in my mind, is to be compared with that of the drainage-tube.

HARVEY AND CESALPINUS.

A THIRD HISTORICAL FRAGMENT.

BY SAMPSON GAMGEE, F.R.S. EDIN.,

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EVERY earnest inquirer knows how

"Hills peep o'er hills, and Alps on Alps arise;"

the pleasure of the ascent, and the hope of crowning it, being checked by the prospect of new difficulties to be surmounted. Such is my position in this research; and I trust it may be accepted as sufficient apology for delay in completing these papers and for their regretted imperfections.

In the previous historical fragments on Harvey and Cesalpinus[1] I did little more than enter upon the consideration of the claim to priority, recently revived on behalf of the great Italian naturalist by Professor Ceradini of Genoa. His advocacy, if unsustained, might have been regarded merely as a tribute of personal and patriotic homage. As such, it might have been allowed to take rank with the numerous impeachments of William Harvey's title, on which the judgment of history has already been pronounced.

But Ceradini's monograph, if fondly partial to his hero, is too manifestly inspired by a desire for truth, is too intrinsically weighty, and has acquired too much importance throughout Europe, to be disposed of without serious consideration.

It is not merely that Andrea Cesalpino has found in the Genoese professor his most industriously erudite, speciously ingenious, and vehemently eloquent advocate; but that by him William Harvey has been attacked as a trickster and usurper,[2]—a charge substantially ratified, and accepted as fully proven, by the Medical Academy of Rome, in public meeting assembled in the University of that city, in presence of the Italian Minister of Education.[3]

If the Italians be, as I am clearly of opinion they are, unjust to our illustrious countryman, it unfortunately happens that his eulogists have too often, and too completely, lost sight of his great indebtedness to his Italian masters, the founders, the creators, the glories of the greatest school of anatomy which the world has ever known.

It seemed at one time as if the decision of Flourens[4] had finally disposed of Italian rivalry. Unfortunately, he repeated the error of most Frenchmen, who, rarely impartial in questions of international merit, are scarcely ever just when the claims of the Italians are in the scale: another illustration of the proposition that, with nations as with individuals, impartiality rarely coexists with near blood relationship and with similarity of brilliant endowments.

As already hinted in the second of these fragments, the modern Italian claim for priority in the discovery of the circulation of the blood is not confined to Ceradini *pro* Cesalpino. More than twenty years after his first assertion of Carlo Ruini's claim,[5] Professor Ercolani, of Bologna, has not merely revived it; he has published in its defence a memoir,[6] scarcely less attractive for the originality of its matter than for the temperateness of its tone and the classic elegance of its style. If, in his endeavours to extol the Bolognese senator, Ercolani has done some injustice to William Harvey, his concluding chapter[7] is, on the whole, one of the most appreciative and fair judgments ever pronounced by any foreigner on our distinguished countryman; for, curiously enough, this hotly contested question has even disturbed the mental balance of the Germans.

Very severely critical on Ceradini's monograph, Henri Tollin, of Magdeburg, under the auspices, and with the avowed assistance, of Preyer, has published a memoir,[8] to prove that the circulation of the blood was discovered by Michael Servetus; yet another revival of a claim often very carefully examined, and, one would have thought, triumphantly disposed of. Since, however, it is persisted in by such learned and responsible men, it may conveniently be re-examined in this place, as relating to an author who, in chronological order, is the first whom Harvey's critics regard as his formidable rival.

Born at Villaneuva in Arragon in 1507, and burnt at Geneva in 1553, with the tacit consent, if not by the express order, of Calvin, Michael Servetus was one of the most remarkable men of his eventful time. Admitting that he knew the pulmonary circulation,[9] Tollin's claim that he was the discoverer of the circulation of the blood[10] is inadmissible. The "Christianismi Restitutio," in which Servetus' exposition of the pulmonary circulation occurs, is a strange admixture of ingenious speculations and manifest absurdities; embodying a few physiological truths in a maze of anatomical errors. He speaks of the brain as a cushion or bed for the vessels of the animal spirit; of the nerves as a third class of vessels continued from the arteries; and of the ventricles of the brain communicating with the nasal fossæ through the ethmoidal foramina. Well enough may Professor Preyer head a note "Unintelligible,"[11] appended to one of a series of conjectures, which elicit from Servetus' most recent eulogist the exclamation, "Everywhere physiological fantasies in service of the Bible." The attempt to reconcile the mystery of the Trinity with physical science was, as it ever must be, utterly hopeless; and, in making it, the daring Spaniard wrecked his reputation and his life.

Strangely enough, Tollin, while severely criticising Ceradini, yields much that he contends for in praise of Cesalpinus, as the describer of the double circulation; and substantially gives up the title which he elsewhere claims so uncompromisingly for Servetus, when he admits that "*certainly he did not speak enough of the great circulation.*"[12]

How can an author be said to prove knowledge of the circulation of the blood who only fully describes its course through the lungs? "Servet ist Galenist," justly observes[13] Herr Tollin, and that fact is the key to explain the physiological knowledge of the mystical physician and divine. There is no evidence that Harvey knew the work of Servetus, but he avows full knowledge of the work of his contemporary

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[1] THE LANCET, Nov. 11th and 25th, 1876, pp. 670 and 743.

[2] Nessun dubbio che con questi *sotterfugi* l'Inglese mirasse ad *usurpare il vanto* di scopritore. (Ceradini, op. cit., 2nd edit., p. 175.)

[3] Inaugurazione della Lapide ad Andrea Cesalpino nella R. Università di Roma. Avvenuta il giorno 30 Ottobre, 1876, promotrice l'Accademia Medica di Roma. Due discorsi letti in questa occasione dal Prof. F. Scalzi E. C. Maggiorani. Roma, Tipografia Romana, 1876.

[4] Histoire de la Découverte de la Circulation du Sang. Par P. Flourens. Deuxième edition, revue et augmentée. Paris, 1857.

[5] Ricerche Storico Analitiche sugli Scrittori di Veterinaria. Per G. B. Ercolani. Torino, 1851. Vol. I., p. 462 et seq.

[6] Carlo Ruini: Curiosità Storiche e Bibliografiche intorno alla Scoperta della Circolazione del Sangue, del Prof. Comm. G. B. Ercolani. In Bologna, presso Nicola Zanichelli, 1873.

[7] Guglielmo Harvey, op. cit., pp. 135–164.

[8] Die Entdeckung des Blutkreislaufs durch Michael Servet (1511–1553) von Henri Tollin in Magdeburg, in Sammlung Physiologischer abhandlungen herausgegeben von W. Preyer. Erste Reihe. Sechstes Heft. Jena, 1876. I owe the reference to this monograph to the personal courtesy of Prof. Ceradini, who has added greatly to the obligation by favouring me with the proof-sheets of his reply: "Difesa della mia Memoria intorno alla Scoperta della Circolazione del Sangue contro l'assalto dei Signori H. Tollin, Teologo in Magdeburg, e W. Preyer, Fisiologo in Jena; e qualche nuovo appunto circa la Storia della Scoperta Medesima, per G. Ceradini." Genova: Tipografia del R. Instituto Sordo-Muti, 1876.

[9] The following is the passage of the Christianismi Restitutio of Servetus quoted at length by Flourens from the unique copy in the Paris Library, the self-same copy which formerly belonged to Dr. Richard Mead: "Generatur ex factâ in pulmonibus mixtione inspirati aëris cum elaborato subtili sanguine, quem dexter ventriculus cordis sinistro communicat. Fit autem communicatio hæc, *non per parietem cordis medium*, ut vulgo creditur. Sed magno artificio a dextro cordis ventriculo, longo per pulmones ductu, agitatur sanguis subtilis à pulmonibus præparatur, flavus efficitur, et à vena arteriosa in arteriam venosam transfunditur....." (Flourens, op. cit., p. 267.)

[10] Tollin, mem. cit., p. 21: "Michael Servet ..... der verfasser ..... dem die Physiologie die Entdeckung des Blutumlaufs verdankt....." Op. cit., p. 32: "Michael Servet, der Entdecker des Blutumlaufs hat keine vorganger gehabt."

[11] Unverstandlich. Preyer in Tollin, mem. cit., p. 11.

[12] "Cesalpin, der den doppelten Umlauf beschreibt ..... Servet spricht nicht deutlich genug von dem grossen Kreislauf." (Tollin, mem. cit., p. 46.)

[13] Page 22.

Realdus Columbus, in whose treatise "De re Anatomica"[14] the pulmonary circulation is very clearly described, and proved on the basis of dissections of the human body, and of vivisections. It is beside my object to discuss here the relative merits of Servetus and Columbus. The knowledge they possessed of the pulmonary circle was doubtless of very great advantage to William Harvey. He has acknowledged his indebtedness to Columbus and to Galen, in whose treatise, "De Usu Partium," so many fundamental facts relating to the circulation of the blood, and to the mechanism of the valves of the heart, are to be found.[15]

Prof. Ercolani's claim for Carlo Ruini has *primâ facie* a better foundation, to judge from the following passage, which is here translated literally[16] from his chapter on the Heart:[17]

"The office of these ventricles is, of the right, to dispose (disponere) the blood that *of it may be generated the spirits of life, and to nourish the lungs;* of the left, is to receive this blood so disposed, *and convert a part of it into the spirits which give life*, and send the remainder, *together with those spirits*, through the arteries to all parts of the body. In one, and in the other ventricle, are two mouths, or holes; through those of the right the blood enters from the great vein, or cava, and goes out by the arterial vein,[18] and through those of the left ventricle, the blood enters *accompanied by the air prepared in the lungs* through the arterial vein; *which all made spirituous and most perfect in the left ventricle* goes out (guided by the great artery) to all parts of the body, *with the exception of the lungs*, to make them participators of some heat, which gives them life. Of these holes of the heart each has at the mouth three little curtains, called by the Greeks Hostioli; of which some are towards the inside, and others towards the outside; at the mouth of the first hole, which is seen in the right ventricle, to which is joined the great vein or cava, is a curtain or thin membrane, which all round encircles the hole; which, proceeding somewhat towards the concavity of the ventricle, divides itself in three curtains, each one of which finishes, as in a point of a triangle, a little above the middle of the length of the ventricle; and from each of these points arise some nervous threads, which go to insert themselves into the sides of the ventricle towards its end, and are attached to the substance of the heart in the curtains and in the threads. Those curtains were placed there by nature, in order that, opening themselves, they might allow, when the heart widens itself, the blood to enter from the great vein into the right ventricle, and might prevent, when the heart retracts itself, shutting the first hole, that the same blood entered therein might not go out by the arterial vein, and might re-enter in the great vein. The curtain, then, which is at the second hole of the same right ventricle, to which the arterial vein is attached, is not made of a simple curtain; on the contrary, it is divided into three very distinct, each of which commences as in a semicircle, from the trunk of the arterial vein, raising itself somewhat at the commencement, and then becoming somewhat thicker, widens itself out from the heart; and becoming thicker makes some tubercles, which stamp themselves in the highest part of the heart, from which rise three curtains, each as in a half moon, without attaching themselves to the highest part of the heart, or to any other part. These three curtains, opening themselves, allow the blood to go out by the arterial vein to the lungs, and prevent its return into the right ventricle through the open mouth of the arterial vein when the heart widens itself....." and so proceeds the description of the other orifices and valves.

I brought Ruini's work before the Medical Society of London some twenty years ago, when I was disposed to admit the claim preferred in the Bolognese Senator's behalf by Professor Ercolani. Further thought and research have convinced me that his title cannot be maintained; and I submit with deference, yet with the fullest confidence, that the tablet recently erected in Bologna does not express the truth when it says of Carlo Ruini that he first revealed the circulation of the blood ("e primo rivelò la circolazione del sangue.")

In the translated passage from the work now under consideration, I have marked in italics some parts which are palpable and fundamental errors—errors which Servetus and Columbus had corrected nearly half a century before—e.g., the generation of the spirits of life in the heart, the nourishment of the lungs by the blood from the right ventricle, the passage of blood mixed with air through the vessels, and the distribution of blood through the aorta to all parts of the body, with the exception of the lungs. Many other passages could be quoted from Ruini to show that his knowledge of the movement of the blood, of its return and circulation, was incomplete and erroneous. There is no evidence whatever to indicate that his book was known to Harvey. As a veterinary treatise it soon acquired considerable repute in Europe; but such accomplished bibliographers as Haller and Portal took no notice of it, and it was left to Professor Ercolani in 1851 to call attention to the passage on the heart and blood. It has been incidentally remarked that Ruini knew less of the pulmonary circulation than did Servetus and Columbus, and he knew less of the general or systemic circulation than did Cesalpinus, to whose claims as a discoverer the next and concluding historical fragment will be specially devoted.

Birmingham.

[14] Realdi Columbi Cremonensis in Almo Gymnasio Romano Anatomici Celeberrimi de Re Anatomica, lib. xv., Venetiis, ex Typographia Nicolai Bevilacquæ, 1559.

[15] Vide Sydenham edition of the Works of William Harvey, p. 40–45. The editor, Dr. Robert Willis, at page lvi. et seq., criticises Servetus' rival pretensions with learned and sound appreciation of their feebleness.

[16] The first edition of Ruini's work appeared at Bologna in 1598, the year Harvey entered at Padua as a medical student. The second, merely a reprint, is the one before me. It was published at Venice in 1599. It is a folio finely illustrated, some of the drawings presumably by Agostino Caracci. The precise title of the work is "Anatomia del Cavallo, Infermità e suoi rimedii, opera nuova, degna di Qualsiasi Principe, et Cavaliere, e molto necessaria à Filosofi, Medici, Cavallerizzi e Marescalchi." Del Sig. Carlo Ruini, Senator Bolognese. Adornata di bellissime figure le quali dimostrano tutta l'anatomia di esso cavallo. Divisa in due volumi. De quali questo primo, in cinque libri copiosamente dichiara tutte le cose appartenenti alla detta anatomia. Con due bellissime tavole, una di capitoli, e l'altra delle cose notabili. All Illustrissimo, e Eccellentissimo Signor Cesare di Berbone Figliudo del Christianiss. Henrico IIII. Re di Francia e di Navarra, &c., con licentia del superiore et privilegii. In Venetia, MDXXCIX., appresso Gasparo Bindoni, il Giovane.

[17] Pages 108–110.

[18] In those days the pulmonary artery was called the vena arteriosa.

THREE CASES OF HYDROPHOBIA IN GLASGOW.

FIRST CASE OF HYDROPHOBIA IN THE GLASGOW ROYAL INFIRMARY.

BY JAMES DUNLOP, M.D.,
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THE following history of the case is supplied by Robert Forrest, M.D., under whose care the patient was before admission into the infirmary.

Francis H——, aged thirty-nine, was bitten in the hand by a brown retriever bitch, on Saturday, the 22nd July last. The wounds, which had bled profusely and been cauterised with nitrate of silver, healed up, but about eight days before he turned ill one or two of them broke out, and on Saturday, September 22nd, he remarked to a friend that his thumb was itchy, and his arm stiff. He was seen about 6 P.M. on the following Monday by Dr. W. Forrest. Besides the stiffness he now complained of a sensation of sleeping in the arm, and Dr. W. Forrest found the spine about the lower cervical and upper dorsal vertebræ tender to pressure. Hydrophobia being evidently in the patient's mind, it was attempted to allay that suspicion by suggesting that it might have been due to exposure to a draught he had been working in. Later in the evening difficulty of swallowing fluids came on, apparently all at once, and when Dr. Robert Forrest saw him on Tuesday morning, he had complete inability to swallow water, though he could manage soft solids. He now spoke of his arm being painful. Before his removal to hospital, his condition not being very urgent, Dr. Dunlop was asked to see him with Dr. Forrest, and it was agreed to delay till next day.

About 7.30 next morning, Wednesday, the third day of the illness, he suddenly asked his wife to go out of his way lest he might do her some harm in spite of himself. The same afternoon he was removed to the hos-

pital under the care of Dr. Dunlop. While at home, he had introduced into his arm hypodermically one-fifth of a grain of acetate of morphia, as it seemed to allay the pain and discomfort there, and otherwise to have soothed him. A second and larger dose ten or twelve hours after, however, did not produce any appreciable effect. He also had a mixture of chloral and bromide of potassium during the two days he was under observation at home.

At half-past two on the afternoon of Wednesday, the 27th of September, 1876, he was admitted into ward No. 15 of the Royal Infirmary, when the following note of the case was taken:—When the patient was undressed and placed in bed it was observed that he appeared very much frightened, and although he was spoken to in a very soothing manner, the look of terror continued. He said he was not afraid, he had nothing to fear, but he could not help his look. His eyes were staring open, and his pupils were greatly dilated. His pulse was 84 and good, and his tongue clean. While the notes were being taken he sighed or sobbed aloud several times as if in mental distress. He complained of pains and tingling uneasy sensations in both arms. The pains in the right began, he said, in the bitten thumb, passed downwards to the tips of the fingers, and then afterwards to the right shoulder and neck, then across the back, and down the left arm to the finger-points. The pains were described as shooting, or coming in currents from the right hand. When asked where the pain was most severe, he pointed to the back of right elbow and arm about its middle. There was no appearance of swelling or redness along the lymphatics, and there was no swelling of the bitten thumb. The bites, which had been six in number, were all cicatrised, with the exception of the pair nearest the point of the thumb; these were over the metacarpo-phalangeal joint. It was these two wounds which had been itchy, tingling, and hot, and he thought that the scratching of them had caused them to reopen. They were quite superficial and of small size, and were free from surrounding irritation and discharge. His skin was observed to be very sensitive, and he said he had the feeling as if frosty air was being played upon him like spray. He once had Richardson's ether spray for the production of local anæsthesia played upon his hand, hence the simile. He also complained of stiffness and uncomfortable sensations about the neck and throat. He thought his tongue was cleaving to, or in constant apposition with, the roof of his mouth, that there was a degree of tightness about the throat, which extended downwards into the chest, where there was a feeling as if a heavy weight was pressing upon his breast-bone.

A consultation of the entire surgical staff was held at 7.30 P.M., and, in the presence of the surgeons, he was asked to drink some water from a cup. At this request he became slightly restless and excited, and said he would rather not try it. After a little persuasion he consented to do so. He hurriedly, and as if anxious to get over the trial, seized the cup in both hands, and, putting it rapidly to his mouth, drank the water. In the act of swallowing, the muscles of the neck and chest became rigid, his head was thrown suddenly upwards and backwards, and his arms were extended, while the eyes were staring, and his whole expression was one of fear and depression. The act of swallowing was repeated several times, and always with the same result. He was advised by one of my colleagues to try to drink the water calmly and without any fear, but his reply was that, "although he got the whole world, he could not help it." It was found, however, that he could swallow with greater ease, though with some difficulty and effort, a small quantity of water when given in a spoon. The very raising of a vessel with water to his lips, without drinking, was followed by the apparent spasmodic movements already described. Later in the evening, however, pulpy food in the form of porridge and milk was supped with a spoon without much difficulty, only slight movements being observed. At 10 P.M. a purgative powder was administered, and the bowels were freely moved after an interval of three hours.

Sept. 28th.—9 A.M.: For three or four hours during the night he remained quiet and comfortable, but he had no sleep. He had fifty grains of bromide of potassium in a cupful of hot coffee, and the swallowing of it was not accompanied by any special difficulty.—At 4 A.M. he had a spasm of the muscles of the neck, which he described as having been caused by the cold spray having been played through the chinks of the wooden screen which surrounded his bed; and at 6 A.M. there was again another and more violent one, which he attributed to the noise of the water running from the pipe in the adjoining scullery, and which he earnestly asked to have stopped. When seen at the visit hour his pupils were observed to be dilated, and the conjunctivæ slightly congested. Though quite conscious, he was disposed to talk; his words coming out with some excitement. The pulse was 94. On examining his throat the mucous membrane was seen to be congested; on the left side of the under surface of the tongue were two distinct pustules with yellow tops, and on the right side was a little one, apparently in the course of formation. During the day he continued quiet, taking food with some relish and with only a little difficulty in swallowing. When seen at midday the hope was expressed that the symptoms, whatever was their origin, were passing off, and that the patient was in a fair way towards recovery. At 3.30 P.M. an event took place which completely and suddenly altered the aspect of the case. While the patient was lying, to all appearance, calmly in bed, a dog passed through the ward, and was seen by him. Immediately thereafter he started up in bed with his arms extended and his eyes staring, his whole countenance indicating intense horror. He jumped out of bed, and in attempting to climb over the screen, fell upon the floor. There he lay for a few minutes, groaning and talking, and tossing his limbs about. During the following three hours he had repeated attacks of what seemed to be fits of opisthotonos, and in the intervals between the fits he became excited and almost unmanageable. He threatened to bite those around him, warned them to beware of him, and he made several attempts to throw himself out of a window. At 7.30 P.M. he was put under the influence of chloroform, removed to a room upstairs, and a straitjacket was put on him. It was reported that in the struggle which took place in the ward, he bit one of the attendants on the hand. At 9 P.M. he was still under chloroform. Pulse 100; pupils dilated. At this hour it was arranged that the clinical assistants, both medical and surgical, should carefully watch the patient during the night, and, if necessary, to keep him under the influence of chloroform.

First watch, 9.30 to 11.30 P.M.—Was put under the influence of chloroform in order to take the temperature in the rectum. The thermometer was in the rectum for twelve minutes; it registered 102°, while the pulse was 100. During the administration of the chloroform much ropy mucus was expectorated, and while fairly under the influence of the anæsthetic the pupils were contracted, to become widely dilated on the chloroform being withdrawn. When fairly out of the influence of the chloroform, his ravings were loud and incoherent, and he did not understand what was said to him. When asked to put his tongue out, he continued to rave in the same incoherent manner as before. Some relatives called to see him, but he failed to recognise them. There were some twitchings of the muscles on the right side of the face, disturbing somewhat the mouth.

Second watch, 11.30 P.M to 1.30 A.M. (Sept. 29th.)—Temperature 101·4°; pulse 110. These observations were taken when the patient was under chloroform. Before the chloroform was administered the pulse was 90, and good. The only quiet moments the patient had during this watch were when he was under chloroform. In the interval his condition was one of maniacal excitement, without any lucid interval.

Third watch, 1.30 A.M. to 3.30 A.M.—Temperature 101·4°; pulse 120. When free from the influence of chloroform he struggled violently, and attempted to spit in the faces of the assistants. On one of them putting the chloroform-towel over his face, he told him, to "Take it off, and keep it off," the only sensible remark he made during these two hours.

Fourth watch, from 3.30 to 5.30 A.M.—At 4.30 A.M. patient was offered some beef-tea, which he refused. Shortly afterwards he asked, in a querulous tone, if he could not get some water, and when it was offered him he refused it. On the drinking-cup being carried to his lips, he turned his head aside and made a series of sobbing inspirations. Pouring water from one vessel to another in his hearing did not produce any effect; upon a few drops being sprinkled upon his face the same sobbings were performed, and he complained of such a "low trick being done upon him."

Several spoonfuls of beef-tea were administered, the spoon being introduced quietly into the mouth without asking him. The fluid was swallowed with a deep inspiration, but without agitation or objection. Shortly after a spoonful of water was attempted to be given in the same way, but the patient became so agitated and excited, tossing his head violently about, and with some intelligence he complained of the water being given him without his knowledge. About five o'clock a brother from the country was brought into the room, and the patient at once recognised him, and, upon being asked, gave the name of his brother. For a short time there seemed to be a lucid interval, in which, in pitiful tones of voice, he asked those around him to take him up into some quiet room and have an end made of him. This period of repose did not last long, for in a few minutes, after being breathed upon and fanned with a towel, he became again quite incoherent and maniacal. Temperature 101·8°; pulse 88.

Fifth watch, 5.30 A.M. to 8 A.M. — The assistant made the following notes of the case during this period:—"Patient for the last half-hour has been very restless and talking all sorts of nonsense. He constantly tosses his head from one side to the other, and fixes his eyes stedfastly on the ceiling. While standing behind him and out of his sight, I blew my breath once or twice upon the head and face, when at once the muscles of the neck and of the upper and lower extremities became rigid, and the diaphragm acted spasmodically. The spasm was not followed by a second, without he was again provoked. The saliva does not seem to be secreted in excessive quantity, but his tongue is very often and quickly protruded, and as quickly returned. Beef-tea has been twice offered, and on both occasions spasm of the neck resulted, accompanied by long sighing respirations. He has great horror of fluid, and the mere mention of water excites him. Temperature 101·6°; pulse 124. Urine contains no albumen."

Sept. 29th.—This morning the patient's head was shaved and a blister applied to the back of the head and nape of the neck, and fifty-grain doses of bromide of potassium were directed to be administered. Up to 3 P.M. the patient continued in a state of mania, constantly talking, as before, incoherently and unconnectedly. Three times he snapped at attendants. Several times there were moments of lucidity. Pulse almost normal at times, at other times not higher than 110, good and full. Swallows pretty well. Still little sobs or convulsive movements. Pupils dilated almost constantly. From 3 to about 6 P.M. the patient was as bad as he has yet been—that is, obstreperous, trying to break out of the jacket, asking to be released, talking wildly and profanely; pulse and temperature as above. Till 10 P.M. he was comparatively quiet. At 8 P.M. Dr. Cameron saw him, and the patient answered four or five questions correctly to him, then went off again. Dreads cold water; slightly convulsed in drinking from vessels.

30th.—9 A.M.: The following note was made:—Patient has passed a restless night, talking incoherently, and no sleep; had 250 grains of bromide of potassium during the night without producing any effect. Two other pustules are observed on the under-surface of the tongue, and there is for the first time observed a muco-purulent discharge from the eyes. The surface of the body continues to be exceedingly sensitive.—11 P.M.: Since morning 160 grains of chloral hydrate have been administered without any effect. During the day he vomited a quantity of yellow matter, offensive in odour, and not unlike bile in appearance. Pulse 130; temperature 102·4°. Is still maniacal, but becoming weaker. Has been getting small quantities of brandy, which he swallowed without much difficulty from a drinking-cup.

Oct. 1st.—Symptoms of mania still continue; pupils are dilated as before; hyperæsthesia present. When gently fanned the same effect is produced as before—viz., the brows are knitted, and the breathing is held until the fanning ceases, when a number of sobbing inspirations immediately take place, and when these cease the features resume their natural appearance. There is, however, to-day a decided livid tinge in the countenance. At 4 P.M. he became quiet for a short time, recognised friends and relatives who came to see him, and sent kisses to his children at home, whom he said he would not see again. After his friends left he became greatly excited, and, in addition to the spasms of the neck, there was shaking of the whole frame. Sordes covering teeth; salivation profuse. Pulse 130; temperature 102·4°. Is passing urine in bed. Yesterday he asked for the slipper several times. Discharge from the eyes very copious.

2nd.—At the visit hour the following note was taken:—Patient looks greatly exhausted. Pulse good and full. Still great discharge from the eyes. Ice put on head brings on slight spasms; blowing on the head or fanning has the same effect. Eyes congested. Continues to pass urine in bed. At 11 A.M. a bag of ice was applied and retained on the head for a few minutes. The effect it had was to make him shiver from head to foot. It was removed, but re-applied by and by for a longer time, with the effect of making him outrageously wild, tossing about in bed and talking incoherently. At 3 P.M. a large quantity of yellowish matter was vomited. Pulse 120; perspiration profuse over whole body. Spitting a great quantity of thick fluid. At 3.30 P.M. patient recognised his mother, and at 6 P.M. became very much exhausted, and after vomiting a great quantity of yellow fluid, died at 6.30 P.M. of exhaustion, but not from asphyxia.

Post-mortem examination, October 4th, by Dr. FOULIS, pathologist to the Royal Infirmary. — Body fairly nourished; rigor mortis strongly present; abdomen in places green, and the veins of the surface of arms discoloured; fingers and dependent parts of body livid; nails blue; eyes slightly coated with a purulent substance. On the right thumb were two or three depressed marks like cicatrices along the radial border, and a small, but distinct, livid cicatrix, on the back of the hand, midway between the bases of the first and second metacarpal bones; not far from this last there is a minute abrasion. No other marks on the body.—Heart weighed 10 oz.; structure normal in every respect; rather contracted and empty of blood.—Pleuræ: Both contain old adhesions, especially the right pleura, but no fluid.—Lungs: Right lung dark-red on section; crepitant everywhere, except at margins, where there is a little emphysema. On pressure a dark-red frothy fluid exudes from the cut surface. Left lung rather more emphysematous at margins, but not to an extreme degree; the section of this lung is everywhere deep-red in colour, but crepitant and dry, giving no fluid on pressure.—Stomach congested in the greater extent of its lining; pyloric and cardiac orifices quite normal, as also gullet. The stomach contains a little dark-brown fluid.—Bowels normal; somewhat distended by gas, and with scanty, dark-coloured, slimy contents; at the first part of ileum there was a small congested patch four inches long.—Pancreas and intestinal glands normal.—Gall-duct pervious; gall-bladder normal.—Liver is in patches slightly fatty; near anterior part of falciform ligament is a small cyst, the size of a bean; contents watery. The tissue of liver otherwise normal, weight 45 oz.—Kidneys weigh together 9 oz.; slightly congested.—Spleen 3½ oz.; normal.—Bladder contains a little acid urine, which was tested and found to be slightly albuminous.—Brain, 50 oz.; pia mater vessels somewhat injected; a very little subarachnoid dropsy at posterior part; no dropsy of ventricles; aspect of brain-tissue and brain-structure quite normal to the eye. The skull-cap of normal thickness and appearance.—Spinal cord quite normal everywhere; no disease at fifth cervical vertebra or elsewhere.—The blood in the body is on the whole fluid, only a very few soft clots forming; the colour of the blood is dark, but not more so than in many bodies.—Nerves: An examination of the nerves of the right arm, from the brachial plexus downwards, revealed nothing abnormal.

(To be continued.)

THE TREATMENT OF GENU VALGUM.

BY F. R. FISHER, F.R.C.S.,

SURGEON TO THE NATIONAL ORTHOPÆDIC HOSPITAL, ETC.

AN experience gained from the treatment of a large number of patients suffering from genu valgum, many of them being cases of the severest grade, has convinced me that the deformity may be most effectually relieved by manipulation of the limb and the use of a proper instrument without any operation; I have therefore been much astonished to find advocated such severe methods of treatment as division of the external lateral ligaments, removal

of a wedge-shaped portion of the tibia, and rupturing by force of all resisting tissues, these several modes of curing this deformity having been adopted respectively by surgeons of Dublin, Edinburgh, and Paris.

Genu valgum arises always from ligamentous weakness. It occurs in rachitic children, and in young adults who suffer from "debility" and are employed in occupations which necessitate long standing. In rachitis, equally with an ill-developed osseous tissue, there exists a softened condition of the ligaments; hence the frequent occurrence of posterior curvature of the spine, &c., in rickety children. In overgrown, overworked, and underfed youths, the so-called debility is an ill-nourished condition of all the tissues, the ligaments participating in the general weakness. The ligaments of the knee-joint, being thus affected, are unequal to the task of sustaining nearly the entire weight of the body; they give way, and the inner side of the joint being the least protected, knock-knee naturally results. Genu extrorsum I have never met with but as resulting from curvature of the femur or tibia, or from an outward curve of both these bones. When once established, genu valgum, if neglected, quickly increases in severity, until, the subject of the deformity improving in health, the ligamentous fibres become of normal strength, and there remains, the ligaments having no power of self-adjustment, a shortened and contracted condition of the external, with a stretched and weakened condition of the internal, lateral ligaments of the joint. An acquired contraction of the muscles on the outer side, and a lengthening of those on the inner side of the knee are also present; but I may state here that as the treatment to be afterwards described is pursued their condition is relieved; in no case have I found it necessary to divide the biceps tendon.

In treating a severe case of genu valgum it is necessary not only to relieve the contracted state of the external ligaments, but also to strengthen the weakened internal lateral ligaments, as these latter conduce most materially to the deformity. Subcutaneous section of the external lateral ligaments removes the contraction of those structures only; forcible rupture of all resisting tissues does no more, at least I hope not. The removal of a wedge-shaped portion of the tibia is opposed to common sense, and cannot be supported on pathological grounds; if knock-knee resulted from an overgrowth of tibia, it might be defended. These methods of treatment, all of them of a severe nature, are then unavailing, and may besides cause great mischief to the joint, or even loss of life, whilst by the simple plan of hand-working and retention of the limb in a suitable instrument every indication is answered, and all danger to life or limb avoided.

The manipulation of the joint is thus conducted:—The femur being held firmly round the inner condyle with one hand, and so fixed, the leg is grasped with the other hand above the ankle on its outer side, and then gently and firmly pressed in a direction inwards, not with one continuous pressure, but with a steady lateral motion; or a well-stuffed pad is placed between the knees, and using this as a resisting point, the legs are grasped above the ankles, one in each hand, and pressed in a similar manner towards each other. The person in charge of the patient should be instructed to employ these exercises morning and evening. The contracted ligaments on the outer side will quickly become stretched, and the limbs being placed in a retaining instrument each day's improvement is maintained; the lengthened internal lateral ligaments are also placed in a favourable condition for acquiring contraction. This they gradually attain, but they can only do so slowly; therefore any attempt to at once relieve the contracted state of the external ligaments is useless, as it does not provide for the condition of the relaxed internal ligaments. The improvement of these latter is greatly facilitated by douching the limbs every morning with cold water, and afterwards rubbing them with a rough towel and shampooing.

With regard to the instrument to be used, in slight cases an ordinary straight splint, bandaged on the outside of the limb, is sufficient; a knee-cap attached to the splint is of much service in cases of greater severity. In the most aggravated grade of the deformity a trough splint is the most efficient instrument; this consists of thigh and leg pieces of a trough shape, in which the limb is firmly held by webbing straps; these pieces are connected at the knee by a rachet-joint having a lateral action; there is also a good broad knee-cap. In using this instrument, it must be borne in mind that it is of value as a retaining splint only; that by its power a limb is not to be forced into shape, but as by daily manipulations the deformity is reduced, the instrument is to be carefully adapted to the improved condition of the limb. Any attempt by means of the powerful screw to remedy the genu valgum will result only in pain to the patient, and professional discomfort to the surgeon. The limb having been straightened the patient should for some time wear supporting irons, otherwise in severe cases a relapse will certainly occur.

Genu valgum, besides being an unsightly deformity, seriously affects those who suffer from the complaint, in that it greatly interferes with their powers of endurance, preventing them from walking any distance without great fatigue. Several cases have come under my care which for some time have been under treatment without obtaining relief. I attribute this to the fact that the value of manipulating the limb is not sufficiently appreciated.

Grosvenor-street.

HOW TO USE A GALVANIC BATTERY IN MEDICINE.[1]

BY HERBERT TIBBITS, M.D., F.R.C.P. EDIN.,
HONORARY MEDICAL SUPERINTENDENT OF THE NATIONAL HOSPITAL FOR THE PARALYSED AND EPILEPTIC, ETC.

THE lecturer commenced by a reference to the National Hospital for the Paralysed and Epileptic having been for some years a pioneer of the scientific and methodical application of electricity to the alleviation and removal of disease, instancing the remarkable investigation into animal electricity by Dr. Radcliffe, whose demonstration of the probability of much of what we have been accustomed to attribute to a vital principle being in reality the effect only of electrical charge and discharge, was claimed as a valuable contribution to the correlation of the physical forces. After reference to the discovery by Mr. Netten Radcliffe of the special action of the voltaic current in certain forms of paralysis, and a brief sketch of the varieties of electricity employed in medicine, a description was given of the voltaic, induction, and combined batteries which have been constructed by Mr. Hawksley from the author's designs, and which were stated to place at the service of the busy practitioner instruments that, with ordinary care, he might keep upon his consulting-room table always, as available to his service as his stethoscope or ophthalmoscope.

The different methods of applying electricity were then discussed, and it was explained, that the dry skin being a non-conductor of electricity, dry metallic conductors from an electrical instrument in moderate action when applied to it produced only sparks and crackling, but no physiological phenomena, the electricity not penetrating the skin; but that if these metallic conductors were replaced by well-moistened sponges, very variable phenomena of contractility or sensibility were produced, according as the electricity acted upon a nerve, a muscle, or an osseous surface. That the voltaic current was applied as an *interrupted*, and as a *constant* current; in the former case, the current being interrupted by gliding over the skin one or both of the conductors, or keeping one stationary and lifting and reapplying the second at intervals; in the latter, by maintaining both conductors immovable, or by the feet or hands of the patient being immersed in tepid water with which the conducting wires of the battery were in contact. Radcliffe's "positive charge" was then explained, and it was shown that by connecting the negative pole of the battery with the earth, and carefully insulating the patient, the negative electricity passed away, and that the patient remained charged with positive electricity only. Direct muscular electrisation, by placing the conductors upon points of the skin corresponding to the muscle, was then contrasted with indirect muscular electrisation, consisting

[1] Abstract of lecture delivered before the Hunterian Society, Nov. 8th, 1876.

in causing muscular contraction by acting upon the special nerve-trunk and branches, instead of placing the conductors upon the muscle itself, and the methods of electrising the brain, spinal cord, internal organs, and organs of the senses were shown.

The diagnostic uses of electricity were reviewed, and the importance, in testing muscular irritability, of placing the conductors upon identical points of corresponding muscles was insisted upon. It was shown that where irritability was diminished the disease was, as a rule, in direct proportion to the amount of diminished irritability; that in cases in which, while irritability to faradaism was abolished, the muscles responded to a slowly interrupted voltaic current, the lesion was always peripheral, and that by this differential reaction paralysis of the facial nerve had been diagnosed from facial hemiplegia, paralysis of the extensors of the wrist and fingers due to lead-poisoning from commencing muscular atrophy, muscular atrophy from section of a nerve,—all important questions as affecting treatment. Increased irritability was shown to indicate increased vascularity and irritative lesion of brain or cord or both.

The general principles of electro-therapeutics were then considered: that the influence of faradaism in those cases in which it does not produce muscular contraction is chiefly stimulant, that where it does produce contraction it acts in addition as an artificial gymnast, imitating natural muscular action in a way quite impossible to any agency but electricity; that the interrupted voltaic current is similar in its action upon muscle to faradaism, but that this is complicated by chemical effects upon the animal tissues, and by special influences upon the central nervous system. That the constant voltaic current differs altogether from either of the above; that it consists not only of a current which is continuous, and which does not vary in power during the application, but of this current so applied to the patient by the operator that its flow through that part of the patient's body to which it is directed shall be as continuous as the stream of the current from the battery to the conductors; and it was strongly insisted upon that unless thus applied it is not a constant current at all, and that its therapeutic application will be unsatisfactory; that the effects of the current thus applied are chiefly sedative, restorative, or refreshing and absorbent; that it possesses great power, power sometimes unapproached by any other remedy, in relieving pain; that in its application for the relief of neuralgia the sponges should be so applied as to include the affected nerve in the circuit; that the strength of current should not be sufficiently great to produce pain; and that not only should the conductors be maintained quite immovable, but that care should be taken that the strength of the current should be so gradually increased that no shock is felt, and at the end of the application it must be as gradually decreased. Length of application from five to ten minutes, and frequency, usually, once or twice daily. An interesting case was, however, detailed of a patient who for two years had been subject to attacks of neuralgic pain, occurring from six to twenty times daily. She was galvanised twenty times upon the first day. There was a rapid improvement; the attacks after a month's treatment were reduced to one or two weekly, and in three months the patient was cured. Dr. Tibbits believes that in severe and obstinate cases the full sedative effect of the current is only to be obtained by applying it as frequently as the paroxysms of pain recur. The use of electricity in muscular rheumatism and rheumatic gout was next considered, and cases quoted. In cerebral paralysis no support was given to cerebral galvanisation, and it was advised that peripheral faradisation should not be used until three or four months after the attack, and then only of a strength just sufficient to bring the muscles into full contraction, but that in cases in which the paralysed muscles were cold, blue, flaccid, and ill-nourished, they should be well sponged with the voltaic current alternately with faradisation. Applications to be made daily, or every other day, for from five minutes to fifteen minutes. In spinal paralysis the evidence in favour of direct electrisation of the cord was said to be much greater than could be adduced in support of similar treatment of the brain, and when powerless to cure, it not unfrequently relieved some of the most distressing symptoms. Peripheral faradisation should not be employed during the early periods of active mischief in the cord, but in the persisting localised paralysis following upon myelitis it is often of the greatest service, especially in relieving symptoms of paralysis of the bladder and rectum; the dribbling of urine, which is so troublesome in some paraplegic cases, being frequently relieved. In locomotor ataxy the constant current was recommended as often relieving many of the symptons. Reference was made to Dr. Poore's successful treatment of writer's cramp by localising the voltaic current in the nerves of the affected muscles, and exercising these muscles during the passage of the current by various gymnastic movements; and two successful cases were quoted in which faradisation of the antagonists of the suffering muscles, united with the localisation in the muscles themselves of "Radcliffe's positive charge" for fifteen minutes daily, had resulted in a cure. Similar treatment was most beneficial in a case of torticollis, in which the spasm, which had existed for twelve months, and had resisted every kind of treatment, was finally overcome. The subject of essential infantile paralysis was then discussed, the lecturer saying that the more his experience of this disease extended the more strongly did he feel how lamentable it is that the physiological treatment of the affected muscles in this affection has not yet become the routine treatment invariably directed by the practitioner in attendance, and that within a short time of the onset of the disease. Were it so, he added, an incalculable amount of helplessness and subsequent unhappiness would be spared to children; and if proper treatment is adopted in time the greater number of cases admit of cure, and where perfect recovery cannot be obtained we have the great authority of Mr. William Adams for the statement that deformity ought never to result.

General directions as to treatment were given, and it was recommended that the paralysed muscles should be tested, and each muscle daily electrised for a few minutes with that current to which it responds, and of a strength just sufficient to produce muscular contraction. Even after deformity has supervened similar treatment should be carried out, with tenotomy if the muscles are greatly contracted; and reference was made to a most instructive case detailed by Mr. Adams in his work "On Club-foot," of a boy eight years of age in whom deformity had been removed by operation three times previously at intervals of two years. In Mr. Adams's opinion the relapse had been the result principally of the omission of the physiological means of treatment, which had not been directed to be employed. Under proper treatment the form of the foot was restored, and the muscular power of the limb rapidly improved. A case was then detailed which was first seen by Dr. Tibbits in 1869. The child was then suffering from a typical attack of infantile paralysis affecting the muscles of the left thigh and leg. Electrical treatment was recommended, but circumstances only allowed of its administration upon three or four occasions, and the child went to India, returning in June, 1875, with a useless leg measuring some inches less in circumference than the healthy limb. There being complete abolition of reaction to both currents in all the affected muscles, no hope of benefit was entertained, but, at the earnest request of the mother, she was taught how to apply electricity, and recommended to do so daily, in addition to shampooing. The treatment has been carried out almost daily for sixteen months with a result that is surprising. There is now little difference in the appearance of the two limbs; there is reaction in all the muscles but the anterior tibial muscles, and a large amount of voluntary power has returned.

The lecturer concluded by an expression of regret that the time at his disposal did not allow him to do justice to his subject, though he trusted he had succeeded in indicating the importance of electricity as one of our most powerful and serviceable remedies—as a supplement to, not a substitute for, the more ordinary resources of therapeutics. "A theoretical belief in its efficacy," he added, "is widespread in our profession; its common adoption as a weapon to be not seldom used in our daily battle with disease is yet in the future—may I hope a not distant future,—and that a knowledge of medical electricity may soon be considered an indispensable part of the education of every medical practitioner."

THE DUKE OF CLEVELAND has been appointed President of the Eastern Dispensary, Bath.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum, tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

GUY'S HOSPITAL.

DYSPHAGIA; DEATH; INTRA-THORACIC ANEURISM.

(Under the care of DR. WILKS.)

FOR the notes of this instructive and remarkable case we are indebted to Mr. Percy Reynolds, clinical clerk.

William P——, a leather-worker, aged forty-four, was admitted on December 9th, in an emaciated condition, and afflicted with dysphagia. The family history was exceptionally good. He was a married man, and by his wife, who is living and healthy, had had ten children. His wife had had one still-born, and had also had five miscarriages; but she gave no history of sore-throat, eruptions over the body, pains in the bones, &c., although her hair was somewhat thin. She denied all history of inflammatory affection either of the womb itself or the vaginal passage. When the patient was six years old, he drank some boiling water, and was ill for six months in consequence. He had so-called "bilious fever" when twenty-five, and "inflammation of kidneys" (pain across loins) about eight years ago, when thirty-six; otherwise he had had fairly good health. He had always swallowed well until six months ago; liquids, however, had occasionally returned through the nose more or less during the last few years. Full particulars as to history of venereal affection were not obtained, owing to the man's being very ill and disinclined to be troubled, and to his having died before a complete examination could be made. He was, however, reported to have been temperate and steady in his habits.

Six months before admission he caught cold and suffered from cough, which continued. In three months he found that whenever he attempted to take food he was seized with cough, and was obliged to partly bring it up, whether solid or liquid. For some time he attended as an out-patient at King's College Hospital, where, he alleged, a tube was passed down his throat. The tube seemed "to stick" about the region corresponding to the level of the cricoid cartilage, but was, however, passed beyond the seeming difficulty, and for a time he was generally relieved. He was led to the belief that he had "something" the matter with his throat, but he was not told what. For three weeks prior to admission into Guy's he had had more difficulty in taking food, and had been losing flesh for several months past. On admission he was very emaciated, half-starved, had an anxious and distressed expression, and was apparently very ill. Dr. Wilks happened to be in the ward at the time of his admission. The man was induced to attempt to swallow some milk. He carefully took a mouthful of the liquid, and then with an apparent deliberation swallowed some. Immediately the fluid passed to the back of his larynx an irritative choking cough was produced, and a portion of the milk was at once coughed up, not regurgitated. The remainder was satisfactorily swallowed. There did not appear to be any pain in the act of deglutition, but the man merely refrained from taking food on account of the spasmodic cough, accompanied by a sense of choking, that invariably occurred when an attempt at eating or drinking was made. As far as could be seen with the unaided eye, or felt with the finger, no obstruction of any kind could be made out. There did not appear to be any external signs of enlargement of the throat, either local or general. No blood came away with the liquid coughed up. Diffuse rhonchi and coarse crepitation everywhere audible over both lungs. Pulses apparently equal, but very weak, the man evidently suffering most from starvation. He complained of being choked up by phlegm. No pain after food, and that brought up occurred immediately after it was taken, although the patient said that for some little time afterwards he continued to cough up with his phlegm portions of whatever had been taken previously. No bruit to be heard over cardiac area. Urine abounded with lithates, but contained no albumen. Dr. Wilks ordered the man to be carefully kept quiet, to be cautiously examined with a probang, and to be treated for the present with four ounces of brandy and milk *ad lib.*

Dec. 10th.—Patient has had but an indifferent night, and complained of trouble in bringing up his phlegm, which he said was choking him. He had taken next to nothing since admission, and was apparently weaker. A pint of a mixture of milk, eggs, and brandy having been prepared, the œsophageal tube of the stomach-pump was passed down into the man's stomach. There was not the slightest obstruction to its passage or difficulty in the procedure. On the first occasion the patient pulled the tube out, and it was again passed with the same freedom and ease by the clinical clerk. The nourishing mixture was then passed in by means of a funnel attached to the tube. On withdrawing the tube not a trace of blood or matter was to be seen or found upon it in any part of its course, and there was not the slightest suspicion of its having passed over any obstruction, thickened or abraded surface. The food thus given was retained. Expectoration is muco-purulent in character. It being Sunday, the full examination required for the clinical reports was deferred till the following day.

11th.—After the feeding yesterday the man seemed a little relieved, and certainly swallowed better, for he took without instrumental aid half a pint of milk with an ounce of brandy in it, also some lemonade, and was quite free from pain. About 6 P.M. his breathing became bad, he felt as though he were choking, and he had great pain over his belly. He was then seen by the house-physician, who ordered hot fomentations over the abdomen. There was no tympanites. He continued in pain, and became very restless. Dyspnœa ensued with a great deal of mucous rattling in the throat. He was quite sensible, and at 8.30 P.M. had lost his pain, but said his great trouble was that he could not get the phlegm out of his throat. Some mixture of ammonia and brandy was given, and he revived a little. At 10.30 P.M. an ounce of brandy and egg mixture was ordered every two hours. He lived, however, only long enough to have one dose. He became still more restless, the rattling in the throat increased, and the patient died at 1.25 A.M. The house-physician states that no bruit was discoverable during life, either in front or behind.

Autopsy by Dr. GOODHART, *fourteen hours after death.*—Heart weighed seven ounces and a half, quite healthy. Aorta thin, its coats charged with a grey material. It was much (aneurismally) dilated from the valves to past the left subclavian; here the tube narrowed again, or rather retained its normal size, when turning round the left bronchus, but about half an inch or so beyond it again became dilated into a fusiform aneurismal sac about three inches long, occupying the site of fourth, fifth, and sixth dorsal vertebræ, all three of which were eroded, the fifth mostly. The lower sac contained some clot of laminated appearance towards the bronchus, and it was closely adherent to the lung at its base, so that the lung-tissue was stripped of its surface-layer in getting the sac away. The trunk of the vagus, too, on this side was caught in the sac and closely adherent to the sac wall. On the other side the main trunk was free. The dilated arch seemed to press upon and separate the fibres of the left recurrent laryngeal nerve, as it passed from behind the aorta to its tracheal position. The arch was free from clot. The apertures of the head-vessels were free from narrowing, except, perhaps, the left carotid, which was slightly smaller from pressure. The rest of the aorta was healthy, as also the femorals and radials. The œsophagus was not anywhere obstructed; it was a little displaced round the sac, and had in it two small pouches, one just below the bifurcation of the trachea towards the space below that bifurcation, and one about an inch and a half higher. Both were small, rather elongated diverticula, capable of holding, perhaps, fifteen minims to half a drachm of fluid; and were either congenital or the result of over-distension from pressure of the aneurismal sac below, or due, perhaps, to some former glandular abscess. Probably they were congenital. Liver: Forty-eight ounces; healthy; the diaphragm a little adherent to the right lobe. No evidence of syphilis. Spleen very firm. Lungs: A thin layer of recent lymph all over right upper lobe and part of lower. Both lungs soft and with commencing pneumonia at the

bases. The left lung a little compressed at its base by the aneurismal sac. Larynx a little swollen, and vocal cords unusually close together, but not in any condition which would have prevented free respiration during life. Kidneys rather full of blood, but quite healthy. Prostate healthy. Testes: One quite fibrous, and all its tubes spoilt. At one spot—the more fibrous part of the disease—was a central spot of degeneration, very small in extent, hardly more than a pin's head in size, not distinctly yellow, but yet rather suggestive of a small gumma. No other evidence of syphilis, however, could be obtained in the body.

The nature of the dysphagia in this case was evidently paralytic. Such a condition is extremely rare in cases of intra-thoracic aneurism.

ROYAL FREE HOSPITAL.

SUDDEN DEATH FROM INSUFFICIENCY OF THE AORTIC VALVES.

(Under the care of Dr. COCKLE.)

FOR the following notes we are indebted to Mr. W. J. Pickup.

E. P——, aged thirty, housemaid, unmarried, was admitted in the early part of October, 1876. During the last eight years she had been more or less frequently under the care of Dr. Cockle. Her illness originated in a severe attack of rheumatic fever, during the progress of which the heart became implicated; both aortic and mitral valves were affected, the former, however, to a much greater extent, and leaving as a permanent result free regurgitation through the aortic orifice. Dilated hypertrophy of the left ventricle gradually supervened. In course of time, however, so perfect a compensation was established that she was enabled to resume her occupation, remaining in her last situation upwards of three years. In the spring of last year she was admitted with a second attack of rheumatic fever. Although protracted, this attack, so far as could be ascertained, produced no further mischief in the heart, unless it were to render the slight mitral murmur left by the first attack a little more manifest, but the characteristic murmur of aortic reflux was always strongly marked.

When sufficiently recovered she was removed to a convalescent institution, where she remained some weeks. Shortly after her return, she was re-admitted into the hospital in a state of alarming debility. Her complexion was of waxy paleness; her breathing hurried; the pulse less bounding; the cardiac impulse diminished; the lower extremities were thickly covered with dark purpuric spots. After some days perfect rest in bed, good diet, and ferruginous tonics, the purpuric spots gradually lost their dark hue, and the complexion assumed, to some extent, a healthier aspect. On the morning of the day of her death—Oct. 13th—she looked and said she felt better, and seemed to be progressing favourably. She had no untoward symptoms during the greater part of the day. Five minutes before she died Mr. Pickup passed her bedside, when she was sleeping quietly on her left side. Immediately afterwards he was called back to the ward and informed that, just after he left, she awoke, screamed, threw up her arms, and was dead before the nurse could reach the bedside. She was now greatly cyanosed, and the temperature taken at once was 102·4°, though on the previous day it had been scarcely above normal.

Autopsy, twenty-four hours after death.—Both lungs were considerably congested. The left ventricle was distended and filled with clotted blood, the clot extending up into the aorta. The aortic semilunar valves were thickened, cord-like, and rigid, preventing closure, and admitting free regurgitation. The orifices of the coronary arteries were patent. Patches of atheroma existed in the aorta. The segments of the mitral valves were thickened and fringed with vegetations, but capable of closure; two threads from these, an inch in length, hung free in the cavity of the ventricle. The walls of the left ventricle were thickened, the chamber immensely dilated. The right ventricle was also much dilated. No marked evidence of either fatty or fibroid degeneration was observable on microscopic examination. The heart, emptied of blood, weighed sixteen ounces. There was nothing special to note in the other organs beyond a slight adhesion of old-standing between the pericardium and the lower and anterior surface of the left ventricle. The sac contained about an ounce of clear serum.

Remarks by Dr. COCKLE.—This case exhibits a comparatively rare though direct result of aortic insufficiency—sudden death—in its nearly purest form; for the mitral lesion may, practically, be disregarded. The valvular incompetence resulting from the first attack of rheumatic fever caused dilatation and consecutive hypertrophy of the walls of the left ventricle. So perfect an adjustment was gradually effected that the working of the heart was fairly well maintained for a series of years. A second attack of rheumatic fever was followed by great deterioration of the general health and obvious loss of power; the cardiac adjustment now failed, and eventually, as happens in such cases, at some quite unexpected moment, sudden cessation of the contractile power of the ventricle ensues when its cavity is distended with refluent blood during diastole. In the case detailed, sleep might have had some indirect influence. The enlargement of the right ventricle finds ready explanation.

HITCHIN INFIRMARY.

CASES OF PHTHISIS PULMONALIS TREATED WITH HYPOPHOSPHITE OF SODA.

(Under the care of Mr. GRELLET.)

FOR the notes of the following important cases we are indebted to Mr. E. A. Praeger.

CASE 1.—James W——, a painter, aged thirty-six, admitted Feb. 26th, 1876. Had been losing flesh some months, and had had a cough for the same time, and expectorated a quantity of tenacious mucus. His family history was good.

On admission he was a tall and rather stout man. There was pectoriloquy all over left lung, and amphoric resonance and puerile breathing over right lung. The heart-sounds were feeble. After walking a few paces he was so breathless that he was obliged to sit down. Ordered meat diet and four ounces of whisky per diem, and a mixture containing ten grains of hypophosphite of soda, ten drops of diluted phosphoric acid, fifteen drops of compound spirits of ether, and five drops of tincture of digitalis.

March 21st.—Patient discharged. Breath-sounds clear. No cough. Has gained flesh.

October.—Patient is still working, and has had no return of the cough, and feels nothing the matter with his chest.

CASE 2.—A. C——, aged fourteen, was admitted March 18th, 1876. His brother had been suffering from phthisis for some years, and was lately discharged from the infirmary as incurable. The patient had had a cough and cold for some months.

On admission there was crepitation over left lung; voice very husky. He looked wan, and was very emaciated. Given a mixture of hypophosphite of soda and phosphorised cod-liver oil.

May 6th.—Discharged cured.

October.—Boy continues to do well.

CASE 3.—William P——, aged seventeen, a farm labourer, was admitted May 17th. He had always been delicate. One sister died of tuberculosis; all the rest of the family healthy. He had suffered from shortness of breath for six or seven months, and had had a cough and pain in the left side for several weeks. He sweated very much at night. Had lost flesh, and could not take solid food, as it almost deprived him of his breath.

On admission, he was a tall thin lad; very emaciated; skin dusky, dry, and hot; very pale; clavicles hardly moved when he inspires; crepitation over both lungs; pectoriloquy at apex of both lungs. Ordered a nourishing diet, and the following mixture: twenty grains of hypophosphite of soda, ten drops of dilute phosphoric acid, one-sixteenth of a grain of acetate of morphia, and ten drops of spirits of ether, three times a day; and two grains of oxide of zinc and conium pill at night.

June 12th.—Patient has gained flesh, and is in every respect better. Left lung slightly dull on percussion.

26th.—Patient discharged well.

Nov. 4th.—Patient paid a visit to day to express his gratitude for what had been done for him. He says he is now strong, and can do a good day's work.

CASE 4.—William W——, aged ten, admitted June 27th, 1876. His mother stated that he had always ailed. A few months ago he first had a cough, and rapidly lost flesh. From that time he had always had headache, and appeared dull, so dull, in fact, that he could not prepare his lessons for school. The headache got worse, and he often sat and cried with pain.

On admission the boy was thin and wasted, looked wan and stupid, eyes heavy and dull; crepitation over left lung; head large. When asked where he felt the pain, he pointed over the middle meningeal arteries. Ordered hypophosphite of soda, with diluted phosphoric acid and tincture of chinchona, three times a day, and three teaspoonfuls of phosphorised cod liver oil at night.

Sept. 20th.—Discharged well.

Nov. 13th.—His mother says he is now well and quite fat. He can play about and learn his lessons as well as his companions. He only feels the pain in his head at times.

CASE 5.—George B——, aged forty-three, was admitted Sept. 2nd, 1876. He travelled about the country with a threshing machine. Had repeatedly been wet through. Had been ill for six or seven weeks.

On admission he was tall, pale, and anxious-looking, and very thin. The chest-walls hardly dilated when he took a deep breath. Crepitation at base of right and left lungs; pectoriloquy at apex of left. Appetite bad. Ordered hypophosphite of soda, with phosphoric acid and tincture of chinchona, three times a day, and a compound phosphorus pill at night. Milk diet and beef-tea.

Sept. 8th.—Appetite better; ordered a meat diet.

26th.—Discharged greatly relieved. Sent to occupy the bed for which this infirmary subscribes at St. Leonard's Convalescent Home.

Nov. 1st.—On his return the patient expressed himself as feeling thoroughly well and fit for his work.

CASE 6.—John T——, a groom, aged twenty-six, was admitted November 9th, 1876. He had been much exposed to the weather. Had never had syphilis. Two sisters died of tuberculosis. A fortnight ago he caught a severe cold. Had been "short of breath" for some time previously, but could not say how long. The shortness of breath had rapidly got worse, and he had lost a great deal of flesh.

On admission, he was strumous-looking; skin and hair fair; eyes blue; height 5 ft. 1 in.; very thin and emaciated. Fine crepitation all over region of left lung and at base of right; pectoriloquy all over left lung. Ordered a nourishing diet with plenty of beef-tea, and four ounces of brandy per diem. To take one tablespoonful of phosphorised cod-liver oil every night; and a mixture, containing half a scruple of hypophosphite of soda, ten minims of dilute phosphoric acid, and a drachm of tincture of chinchona, three times a day.

Dec. 21st.—The patient has gradually improved. The lung and voice sounds are clear. He has gained flesh, and looks like a different being. He obstinately insists on going out to-day, although the weather is cold.

Jan. 14th, 1877.—The patient, having left on the day of the last note, went to work while the snow was on the ground. He caught a fresh cold, had pneumonia, and died in a few days.

Medical Societies.

PATHOLOGICAL SOCIETY OF LONDON.

AT the ordinary meeting of this Society on Tuesday last, the 16th inst., Dr. Murchison, the newly elected President, occupied the chair for the first time. The meeting was very largely attended, it having been previously announced that the evening would be devoted to the exhibition of specimens of visceral syphilis. Several valuable microscopic preparations were exhibited by Dr. Greenfield, Dr. Barlow, Dr. Gowers, Dr. Buzzard, Dr. Goodhart, and others; and after the President had delivered his address some of the exhibitors described the specimens brought forward, but many remain to be detailed at the next meeting, when the subject will be debated. An extensive series of specimens from the museum of the Royal Victoria Hospital, Netley, were sent for exhibition by Dr. Aitken.

In opening the proceedings, the PRESIDENT said—

Gentlemen,—The remarks which I have to make, in taking this chair for the first time, will be so brief as not, I hope, materially to interfere with the success of the experiment to be made to-night of a new mode of conducting our business. My first duty is to return my thanks for the great honour which I feel that you have conferred upon me by electing me President of the Pathological Society. I am deeply sensible of the responsibility which is involved in the endeavour to tread in the steps of the distinguished men who have preceded me, and even to discharge satisfactorily the duties of this office at the present stage of the Society's history. This feeling of responsibility is enhanced by knowing the ability and urbanity with which my immediate predecessor has presided over you, and by the conviction that many others might have filled this chair with greater distinction and advantage to the Society than myself. More than thirty years have now elapsed since the first meeting of this Society was held on October 13th, 1846, at 21, Regent-street, under the presidency of one of the foremost pathologists of his day, Dr. C. J. B. Williams. Since its foundation, its career has been one of continued prosperity. You have only to read the account of the first meeting to see that the founders of this Society who survive are now the leaders of the profession, and from the first it may be said that this Society has been the nursery of our rising physicians and surgeons. It is here that they have imbibed that love for pathology which must be the foundation of successful diagnosis and practice, and to the prosecution of which we mainly look for progress in our art. It is not only true that an experienced pathologist can rarely attend a meeting of this Society without learning something new to him; but the very existence of the Society has indirectly contributed to stimulate outside its precincts a line of investigation which before its foundation was disregarded to an extent that few of our younger members would readily believe. The fashion of treating symptoms, rather than of endeavouring in the first place to discover their cause, has been exploded in great measure by the labours of the Pathological Society, which has thus been the means of effecting a great revolution in therapeutics. "Nec silet mors" was the expressive motto adopted by our founders; and for thirty years the dead body has been invoked to reveal every fact bearing upon the pathological process which has terminated life. It has been a characteristic feature of this Society, that its labours have been restricted to a rigid investigation and record of facts, and that no communication has been received unaccompanied by drawings, microscopic preparations, casts or models of the morbid parts, or by the actual specimens themselves, while the statements of exhibitors have constantly been subjected to confirmation or correction by duly qualified committees. The result of our labours has been twenty-seven volumes of "Transactions," which embody the most important facts observed in the dead-houses of our metropolitan schools, and which have obtained a world-wide reputation. Our present danger is that of an embarrassment of riches—of a multiplication of specimens differing little, if at all, from others already exhibited and recorded. The result is that, in order to get through the list in the short time allotted to our meeting, discussion on really interesting and important specimens is often choked, and there is thus a want of life in our meetings. To obviate this inconvenience, the Society has more than once been advised to make a selection from the specimens offered for exhibition. This, however, would not only be a very invidious duty for the Council or secretaries to undertake, but, after some experience of the practical working of the Society, I have no hesitation in saying that I believe such a plan would be most prejudicial to its popularity and best interests. The remedy, it seems to me, rests with the members rather than with the office-bearers. Our junior members more especially ought to bear in mind that specimens which are interesting to them may not be calculated to advance pathological knowledge at its present stage; and, if so, are not

fitted for exhibition to this Society, or for being recorded in its "Transactions." On the other hand, a specimen which is a very ordinary one from a purely anatomical point of view, may acquire great importance from the history, or from observations made during the life of the patient, or may be of great interest in reference to prognosis. The clinical features of the case, in so far as they bear upon the specimen exhibited, come strictly within the province of this Society, and are sometimes lost sight of. It has also often struck me as remarkable how deficient medical literature still is in a careful record of well-authenticated cases, illustrating the possible duration of various anatomical lesions, and how far they are compatible with life and a fair amount of health; and yet a large number of cases of this sort are necessary for the foundation of the still neglected department of prognosis. This is a want which the Pathological Society might well supply by a record of specimens exhibited in this room, where the history has left no doubt as to the duration of the lesion before death. It is to those of our members engaged in family practice that we must mainly look for assistance in this matter. In hospital and consulting practice we see mainly the terminations of disease, and the most erroneous conclusions in reference to prognosis have frequently been drawn from so limited an area of observation. But what I wish especially to call attention to is the desirability of each member, before he brings forward a specimen, asking himself whether it is calculated to advance our knowledge of pathology. In the event of his being satisfied on this point, he ought next to keep in view the main object he has in bringing it forward, —what fact it illustrates, what previous statement it confirms or refutes,—and that object he ought to state to the meeting clearly and prominently, and yet concisely, avoiding as far as possible newly-coined German words, and using language which will be intelligible to his seniors. Long anatomical and microscopical descriptions are better reserved for publication in the "Transactions." In endeavouring to follow them at the meeting, the audience often loses the point of the case, and consequently there is no discussion. If each exhibitor would prepare himself beforehand to give the pith of his case, he would save the time of the meeting, and he would be repaid by the greater attention bestowed on his communication. With the object of promoting discussion, the Council of late years has set apart certain evenings for debates on special pathological subjects, and that they did not misinterpret the feeling of the Society is shown by the great success which attended the debates on tubercle, cancer, bacteria in relation to contagion, and syphilis, introduced respectively by Dr. Wilson Fox, the late Mr. Campbell De Morgan (whose recent loss we so deeply deplore), Dr. Bastian, and Mr. Jonathan Hutchinson. They are now making an attempt to classify certain of the specimens by setting apart special meetings for the purpose of bringing together from different sources a number of examples of the same class of pathological lesions, so as to facilitate comparison, and elicit remarks from those who have paid particular attention to the subject in question. The first experiment of the sort will be made to-night, by the exhibition of a series of specimens illustrative of visceral syphilis, a subject the knowledge of which, thanks to the labours of Dr. Wilks and others, may be said to have originated and grown in this Society. From the list before me the experiment bids fair to be a great success. Due notice will be given of other subjects to be treated in a similar manner. While, then, improvements in the mode of conducting our business must in great measure depend upon individual members, the Council have not been unmindful of their duty in the matter. From the remarks which I have made it must not be inferred that the work for which the Pathological Society was founded is wellnigh completed. On the contrary, notwithstanding all that has been done, we are but on the threshold of pathological knowledge. The volumes of our "Transactions" contain the replies which death has made in thousands of instances to the inquiries put to her. But in a large number of diseases she has been hitherto silent as to her cause. Indeed, very often the morbid appearances which we do find in the dead body, and which are exhibited to this Society, are merely the coarse anatomical results, and not the intimate cause, of the morbid process which has terminated life; we are still in the dark as to the mode of origin of this morbid process—of the first beginning of the disease. In a still larger number of cases, as, for example, in the whole class of the acute infective diseases, death also has not yet revealed either the origin or the mode of operation of the pathological process which has led to the fatal result. Students of our "Transactions" will see that the microscope, to which we are so much indebted for our knowledge of the minute structure of the coarser pathological lesions, has of late years materially assisted us in unravelling the mysteries of the early changes by which healthy is converted into diseased tissue. Nevertheless, for disclosing to us the early origin, the intimate pathology, of most diseases, we must also look for assistance to chemistry and experimental pathology, and it must be confessed that in these directions our Society has as yet done little. Some years ago the Council appointed a chemical committee for analysing and reporting on such specimens as might be submitted to it. Various reasons might be assigned for the fact that its labours have been hitherto few; but the chief has been the difficulty of obtaining material in a condition fit for its successful investigation. With death the chemical processes of disease end and those of dead matter begin; and hence, before the morbid parts are brought to this Society, they are too often useless for chemical examination. It may therefore be worth the consideration of the Council, how far it would be possible to assist members, either by grants of money or by permission to solicit the assistance of the Chemical Committee in determining the chemical nature of the secretions, or of the morbid tissues or fluids, in certain cases of importance, before they are submitted to the Society. The Chemical or some special committee might also be requested by the Council from time to time to undertake certain pathological investigations, involving chemical research, which it would be difficult for individuals to carry out. It is, however, to experimental pathology that we mainly look for progress in our knowledge of the intimate nature of many of those diseases respecting which death has been hitherto silent. It is certainly matter for regret that few of those brilliant researches in experimental pathology which of late years have been made in this country by Dr. Burdon-Sanderson, Dr. Klein, Professor Lister, Dr. Bastian, Dr. Richardson, Dr. Kirkwood, and others, have been communicated to this Society. In fact, if we except the valuable communications on artificial tuberculosis, made by Mr. Simon, Dr. Sanderson, and Dr. Wilson Fox; that of Dr. Sanderson, on the infective agent in pyæmia; those of Dr. Bastian, illustrating the migration of blood-corpuscles through the walls of the bloodvessels; those by Dr. Cobbold, on the production by experiment of cystic entozoa; and that of Mr. William Adams, on the reparative process in the tendons of rabbits after division by subcutaneous and open wounds; our Society has contributed little towards the advancement of what, without fear of contradiction, I may call the most important branch of modern pathology. It might possibly promote researches of this nature among its members were the Society to institute a medal, to be awarded once in two or three years to the gentleman who, in the interval, had communicated the most important results obtained from some such research. I throw this out as a suggestion, without any authority from the Council; but it seems to me that the very existence of such a medal would be a standing evidence of the desire of the Society to encourage researches of the description I have referred to. At all events, of this I am sure, that many of our members are thoroughly competent to undertake and carry to a successful issue such investigations; and now that laboratories for practical chemistry and physiology exist in most of our medical schools, I trust that this Society will no longer incur the reproach of lagging in the rear in this matter, and that before long we shall have communications before us which will reflect lasting honour on the contributors and redound to the credit of the Society. Meanwhile, I am glad to be able to inform you that a commencement has already been made in the direction which I have indicated. The Council have to-night decided to apply to the Government Scientific Grant Committee for a grant of money, to enable a committee of this Society to undertake an organised investigation of the intimate pathology of the morbid processes commonly designated pyæmia, septicæmia, and purulent infection, having special reference to their various causes. Should the scheme be carried out, we have reason to anticipate results of the highest practical importance. It also gives me great

pleasure to be able to announce that during the present session we may hope to have before us the following communications:—1. A contribution to the Intimate Pathology of Contagion; by Dr. Burdon Sanderson. 2. Contributions to the Life-History of Contagion; by Dr. Peter Murray Braidwood and Mr. Francis Vacher. 3. Communications on some of those pathological subjects with which his name is identified; by Professor Lister, of Edinburgh. 4. On the early changes in the vessels in Bright's Disease with contracted kidney; by Sir William Gull and Dr. Sutton. 5. On the changes which occur in the bloodvessels in Bright's Disease; by Dr. George Johnson. 6. On the conditions which are compatible with, or fatal to, the life of Bacteria; by Dr. Bastian. 7. The minute anatomy of Scarlatina; by Dr. Klein. 8. An inquiry, experimental and anatomical, into the so-called Pig-Typhoid; by Dr. Klein. 9. Results of anatomical researches bearing on the etiology of Cancer; by Dr. Creighton, of Cambridge. 10. Certain changes in the Urine produced by Diet, having special reference to the pathology of Scurvy; by Dr. Ralfe. 11. On certain unusual coagulation appearances in Mucus and other Albuminoid Fluids; by Dr. Creighton. 12. On the Pathology of Pectous Changes; by Dr. Benjamin Ward Richardson. In conclusion, gentlemen, I feel confident, that this Society, which in the past has done so much to advance our knowledge of pathology, will continue to do so in the future; that it will maintain its claim to be not merely a Society for the prosecution of morbid anatomy, but to be truly, as its name implies, *The Pathological Society*; and more especially that it will not be unmindful of its mission, to promote the elucidation of those problems which are not only the most interesting in modern pathology, but the solution of which is of surpassing importance, as fraught with incalculable benefits to the human race; so that in time to come, when most of us perhaps have passed away, it may be truly said of all diseases, "Nec silet Mors."

Mr. MORRIS brought forward a recent specimen of Intussusception, which he had a few hours previously removed by operation from a lad twelve years of age, under the care of Dr. Greenhow, at the Middlesex Hospital. The symptoms began on the 10th with pain in the abdomen, followed by vomiting, constipation, and passage of blood from the bowel. The usual treatment by injections failing, and a soft mass thought to be intussuscepted bowel being felt a few inches from the anus, abdominal section was performed. There was then found to be an ileal intussusception with peritonitis, and sloughing of the included gut in two or three places. Mr. Morris therefore cut off the intussuscepted portion, and secured the divided ends of the abdominal wall, thus making a double artificial anus.

VISCERAL SYPHILIS.

Dr. BARLOW exhibited an infant the subject of Congenital Syphilis with Enlargement of the Spleen. The child was first seen by him when four months old, and then, in addition to the ordinary signs of congenital syphilis, it presented enlargement of the spleen—an occurrence which was often ignored and misrepresented. Dr. Gee was the first to draw attention to enlarged spleen in infantile syphilis, and he states that in about one-half of the cases the enlargement can be felt, and in about one-fourth the children die. The enlargement in the present case was less than it had been, but the spleen could still be felt as low as the crista ilii, whilst the other signs of syphilis were in abeyance. As to the nature of the enlargement, it was not lardaceous, and in one case which he had observed after death there were no gummata. Dr. Gee had examined two cases; in one there was capsular thickening. Dr. Barlow contrasted this with the enlargement of the spleen in typhoid fever, in which the organ was softened; but, if adopting Mr. Hutchinson's view of syphilis being, as it were, a thinned-out fever, it was not difficult to appreciate the difference between the two forms of enlargement. The child had also evidence of congenital heart disease—a systolic murmur audible at the apex and conducted round to the axilla; this might be due to a gumma in the heart.

Dr. GREENFIELD exhibited specimens of Syphilitic Disease of the Dura Mater and Cerebral Arteries, of the Brain, and of the Lungs, together with various other specimens illustrative of the processes of growth and degeneration of gummata, and also a number of microscopic specimens and drawings. The specimens were for the most part drawn from a series of post-mortems on 22 cases of syphilitic disease in various stages which he had made at St. Thomas's Hospital during the past two years. Of these, 12 were females, 10 males, whose ages varied between twenty-three and fifty. Of the females, 4 were from twenty-three to twenty-five years of age, one was thirty-five, another thirty-eight, and the rest between forty and fifty. Of the 9 males, 4 were between thirty and forty, the rest between forty and fifty. An analysis of the cases showed that, of those who died from the direct effects of syphilis, the majority were comparatively young. Of the 5 females under twenty-five, 1 died from accident, 1 from syphilitic laryngeal disease, and 2 from thrombosis of the cerebral arteries. Of the 6 males under forty, 1 died from syphilitic disease of the cerebral vessels, 1 from gummata in the brain and dura mater, 1 from laryngeal disease, and the other two from extraneous causes. In the females over thirty the causes of death were—thrombosis of cerebral arteries, 2; of pulmonary artery, 1; lardaceous kidneys, 2; peritonitis after colotomy for syphilitic stricture, 1; hæmoptysis in slight phthisis, 1; pyæmia, 1. Of the males over forty, one died from perforation of the dura mater by a gumma and consequent meningitis, one from the effects of laryngeal disease, one from lardaceous kidneys, and another from cardiac dilatation. Hence no less than 15 of 21 died from the effects of syphilis, and only 3 deaths were entirely devoid of a suspicion of syphilitic causation. In no less than 5 cases there was thrombosis of the cerebral arteries, and in 1 of the pulmonary artery. Lardaceous degeneration of the viscera was totally absent in 18 of the 22 cases. In one case it existed in the kidneys alone to a very slight degree, and in another to an advanced degree. In two it was extremely advanced in nearly all the organs. In neither of the two latter was there any skin eruption or liver disease. The condition of the skin was not sufficiently carefully noted in 8 cases, but in 10 no marks of skin eruptions or ulceration could be found; in 3 there were numerous cicatrices and some rupial eruption, and in 1 old and recent ulcers on the legs. It was observed that in none of the cases of most marked and extensive cerebral disease was there any affection of the skin to be discovered on the most careful examination, and that when the skin was especially affected, there was comparatively slight syphilitic infiltration of the internal viscera, although lardaceous degeneration occurred. Marked changes in the skin were observed co-existing with changes in the larynx, rectum, and lungs. Very marked atheroma of the aorta was found in a female, twenty-three, and in 2 twenty-five years old. In one of them, the atheroma was general; in another, twenty-five years old, very marked everywhere. In several other cases, there was also very marked atheroma, with no renal disease, and the patches were much raised and gelatinous. Dr. Greenfield observed that, although the number of cases was small, he thought they illustrated important points in the general pathology of syphilis. Two specimens of Syphilitic Disease of the Cerebral Arteries were then shown. The first was from a small artery in the pia mater in the neighbourhood of a gumma in the brain, which presented the appearance of a whitish fibrous cord. The section showed that the walls of the vessel were greatly thickened, only a narrow channel remaining. The outer coat was infiltrated with a cellular growth, especially marked around the vasa vasorum. The middle coat was but slightly affected, whilst the inner was greatly thickened, forming a large mass, which nearly occluded the vessel. With higher powers this growth in the inner coat was found to resemble that of a fully-developed gummatous growth, with capillaries of new formation running through it, and traces of a process of organisation being evident. The growth was separated from the blood channel by a distinct endothelial layer. Dr. Greenfield thought the change identical with that described by Heubner in his monograph on the subject. The other specimen, from a case of very advanced and general disease of the cerebral arteries, was a section of a small artery of the cerebellum, in which the vessel was very nearly filled up by the thickening of its walls. This thickening seemed to involve all the coats, and to consist of a hyperplastic change in them, but it was doubtful whether the inner coat was not mainly involved. The condition might probably be regarded as a more advanced stage of disease similar to the first. Similar, though less advanced, changes might, Dr. Greenfield thought, be detected in the vessels in syphilitic new growths in other organs, and also probably played an

important part in the degeneration of gummata. After sketching the mode of origin and growth of gummata as seen in various organs, and pointing out the comparatively high degree of organisation attained by the growth, and its sudden decadence, he stated that this degeneration appeared, from a comparative examination of various organs, to be due to partial occlusion of some of the small arteries and capillaries by proliferation of their endothelium, and this he thought furnished a clue to the peculiar form and mode of degeneration. At least, it seemed to be a point to which further observation should be directed. Dr. Greenfield showed also two specimens of Disease of the Lungs of peculiar character, which he believed to be of syphilitic origin. In one, from a female twenty-five years of age, there were syphilitic ulcers on the legs and other evidence of syphilisation. The change in the lungs was limited to the middle of the lower lobe of the left lung and the lower lobe of the right, and consisted in fibrous bands passing from the pleura inwards along the course of the vessels, producing contraction and puckering of the pleura. Microscopical examination showed them to consist of a fibroid thickening around branches of the pulmonary artery. In the other case, from a man forty years of age, the disease was limited to the lower lobe of the right lung, and consisted of similar fibroid bands which produced a local puckering and drawing in of the pleura, without any pleural thickening. Dr. Greenfield commented on the fact that this condition was only observed twice in over six hundred post-mortems, and in both other evidence of syphilis existed. The condition closely resembled that in a case previously exhibited by Dr. Payne.

Dr. GOWERS exhibited the following specimens:—1. Syphiloma of the Brain, which illustrated the mode in which the new growth invaded the substance of the brain. The growth sprang from the dura mater, involved the pia mater, and invaded the brain-tissue itself by many processes which could be traced, branching and narrowing for some distance into the substance of the convolution, and from the extremity of each a vessel passed. Thus the invasion of the brain took place around the bloodvessels. This mode of extension of cerebral syphilomata was long ago pointed out by Virchow, but its interest lay in the rarity in which such growths arise in the brain itself. He believed that almost all apparently intra-cerebral gummata sprang from processes of the pia mater between the convolutions. The structural continuity of the perivascular sheaths and the pia mater was well known. 2. Growth from the Dura Mater in Congenital Syphilis. This was from a patient under the care of Dr. Hughlings-Jackson. The growth consisted of two nodules, which had coalesced; it was composed of rounded nucleated cells, 1-2000th to 1-3000th of an inch in diameter, together with some fusiform cells, and a delicate fibrillary stroma. 3. Syphilitic Disease of Cerebral Arteries, from an adult male, who had contracted syphilis fourteen or fifteen years before death. There was a large gumma in the anterior lobe of the brain, and the basilar artery was much thickened by a growth outside it. The nodule shown was from the middle cerebral. One branch was still pervious, but much reduced in size; another almost obliterated. Microscopically, a small-celled growth, varied in places by fusiform cells and delicate fibrillar stroma, was seen outside the vessel and appeared to take its rise in the outer coat. The inner coat was contracted, and appeared to be thickened, whilst the cavity of the vessel was occupied by a mass formed of cells similar to those in the outer wall of the vessel, the growth having at this spot penetrated all the coats. 4. Syphilitic Nodule in the Lung, from a patient who presented also two gummata in the cerebellum, but no other visceral lesions. The nodule was about one-third of an inch in diameter, ill-defined, and presented several points of caseation. The structure of the nodule was that of a small round-celled growth, partly around the vessels, and infiltrating the walls of the air-cells, which were occupied by a mixture of new growth and inflammatory products. It was not possible to distinguish it from tubercle histologically, but bore a striking resemblance to the growth just described in the cerebral artery. It seemed then that histological examination alone could not decide the syphilitic or tubercular nature of a growth in the lung. Dr. Gowers pointed out that the combination of growth and inflammatory products also presented a marked resemblance to that seen in tubercular phthisis, and that a more widely disseminated change would have led to a condition of lung such as is often seen in the latter disease.—Mr. HUTCHINSON inquired what was the age of the patient suffering from congenital syphilis exhibiting growth in the dura mater. Meningeal growths were so rare in hereditary syphilis that it was quite possible the case was an instance of acquired syphilis in a young subject.—Dr. GOWERS, in reply, said that the patient was twelve years old, and the symptoms of hereditary syphilis were such as to be conclusive to Dr. Jackson.

Dr. BARLOW exhibited specimens of Syphilitic Meningitis and Choroiditis, from a female infant who was brought to him when one month old with snuffles, but no rash, and a specific history on the father's side. He saw the child again three months later. It had had eleven fits, was much wasted, and presented symmetrical serpiginous ulcers on the nates. Later it suffered from laryngismus and carpopedal contractions. In the fundus of each eye were flecks of brownish exudation in the choroid, and the detection of this disseminated choroiditis suggested strongly the presence also of disease of the membranes of the brain. The infant shortly died, and at the post-mortem examination the thoracic and abdominal viscera were natural. In the skull there were several spots of adhesion between the arachnoid and dura mater, as well as some greenish lymph. The pia mater was thick and fibrous, and in one or two places its thickened vessels appeared like white threads. There were no granulations, but a few spots of superficial softening in the cortex cerebri. Mr. Nettleship had examined the choroid membrane, and found collections of corpuscles in the chorio-capillaris, not arranged around the bloodvessels nor the seat of degenerate changes. In these respects these syphilitic growths in the choroid markedly differed from tubercle, which invariably caseates, and is certainly perivascular in its growth. In the pia mater there was a great excess of fibrous tissue, and a diffuse infiltration of lymphoid nucleated cells, while the vessels showed a growth in their inner and middle coats proceeding to such an extent as to perfectly occlude them. After the occlusion of the vessel new vessels form in its substance.

The Society then adjourned.

CLINICAL SOCIETY OF LONDON.

THE annual meeting of the Clinical Society was held on June 12th, Sir W. Jenner, the President, in the chair. In addition to the special business of electing the officers for the ensuing year, &c., a report of which will be found in another part of our columns, a very interesting discussion was raised by papers read by Dr. Hermann Weber and Dr. Cavafy on the employment of salicin and its congeners in rheumatic and other fevers, a remarkable unanimity being exhibited by the speakers, with one or two exceptions, in the belief of their great value in the treatment of acute rheumatism.

Dr. HERMANN WEBER read a paper founded on cases illustrating the Treatment of Rheumatic Fever and some other febrile diseases by Salicin and its congeners. After alluding to the rapid establishment of the reputation of these remedies in the treatment of rheumatic fever, and to the remarkable and uniform success of salicin in the hands of Dr. Maclagan, and many of his followers, to a similar success of salicylic acid in the hands of Stricker, Broadbent, and others, and to some failures in the practice of several observers, he gave the result of his experience both in rheumatic fever and some other febrile affections. The cases included fifteen of rheumatic fever, four of gonorrhœal rheumatism, two of acute gout, four of typhoid fever, two of ague, two of the hectic of phthisis, one of quinsy, and two of scarlet fever. Of the fifteen cases of rheumatic fever, eight were treated by salicin, four by salicylic acid, and three by salicylate of soda. No essential difference was observed in the effects of the three remedies. In eight of the cases, mostly mild, the disease was checked within two to four days, without any unfavourable accidental effects of importance, by doses of fifteen to twenty grains, given at first every hour, and afterwards every two or three hours. In one case the attack

was rapidly overcome, but all the phenomena of serious collapse, accompanied with delirium, attended the complete defervescence, though only 255 grains of salicin had been given in thirty-four hours; in one, of subacute type, three relapses occurred, owing to which, although each single attack was rapidly relieved by the remedy, the duration of the disease extended over five weeks; in three others the first attack was checked by the remedy, but the relapses which occurred had to be treated without salicin or salicylates, on account of the vomiting produced by them; in one case the disease rapidly increased in severity, and became complicated by pericarditis, in spite of large doses of the remedy given at short intervals during five days. Four cases of gonorrhœal rheumatism, attended by slight pyrexia (99° to 101° F.), were treated. One was sick after every dose of either drug; one took for two days fifteen grains of salicin every two hours, then for three days twenty grains of salicylate of soda every two hours, without obtaining any more benefit than is usually produced by rest, and the remedy had then to be discontinued on account of nausea and giddiness; in a third case the fever and swelling in the joints and pyrexia were much relieved after two days of the treatment, whilst the swelling of the joints and state of the urethra were not materially influenced; in the fourth case, after three days' use of salicylate of soda, twenty grains every two hours, the pyrexia, pain, and swelling were much reduced, the state of the urethra remaining almost unchanged. In the two cases of acute gouty inflammation of the knees, feet, and hands, accompanied by pyrexia (99·5° to 101·5° F.), no material benefit was derived from either salicin or salicylate of soda. In the four cases of typhoid fever, three of them of average severity in young adults, salicylate of soda in doses of forty grains three or four times a day, or sixty grains twice a day, exercised a distinctly antipyretic effect, causing diminution of temperature from 1° to 2½° F., together with slight reduction in the pulse rate, and the same was the case when enemata with 120 grains were given. Vomiting and prostration in two, and intolerable nausea in the third, rendered discontinuance of the remedy necessary, and the pyrexia again increased. The duration of the whole disease was probably not materially influenced, and the drowsiness, tendency to diarrhœa, and dryness of the tongue were diminished during the use of the remedy, and nourishment was taken more readily. In the fourth, a fatal case, the symptoms were excessively grave from the beginning, stupor and vomiting, and salicylate of soda was given only on a few days, with the effect of lowering the temperature, but neither the pulse-rate nor the graver nervous symptoms. In two cases of ague, one of tertian, the other of quotidian type, neither salicin in thirty-grain doses three times a day, nor salicylate of soda in sixty-grain doses, had any curative effect. In two cases of hectic fever in phthisis, the thirty-grain doses of salicin given in the forenoon had several times the effect of diminishing the intensity of the evening pyrexia, but in one of the cases the remedy had to be discontinued on account of the prostration produced by it, in the other it seemed to lose its effect. In a case of chronic pneumonia of the lower part of the right lung, a single ninety-grain dose of salicylate of soda given several mornings reduced the evening pyrexia very considerably. Single cases of cynanche tonsillaris, scarlet fever, and scarlatinal rheumatism were also treated in a similar manner, the effects being apparently favourable. In comparing his own experience with that of others, Dr. Weber arrived at the conclusions:—1. That salicin and its congeners are powerful antipyretics, equal to quinine, with the exception of the effects of the latter upon ague; against which they are comparatively powerless. 2. That they are of more general value in the treatment of rheumatic fever than any remedies hitherto tried, although they are not applicable in all cases, and thus not always able to prevent complications. 3. That their antipyretic influence may be usefully employed in other febrile diseases, such as typhoid fever, in combination with other modes of treatment, such as alcohol and bathing. 4. That their use is occasionally attended by accidental symptoms, some of these being unimportant, such as noises in the ears, various degrees of deafness, giddiness, nausea, abundant perspiration, and possibly a cutaneous eruption; while others are graver, such as vomiting after each dose, delirium and collapse, pointing to the necessity of caution and watchfulness, especially in states of heart disease and exhaustion. 5. That there is no essential difference in the action of the three remedies mentioned, but that salicylate of soda, being more soluble, and more easily absorbed, exercises a more rapid effect, but requires to be given in somewhat larger doses than either salicin or salicylic acid; that of the two others, salicin is so far preferable in that its taste is less disagreeable, and it is more soluble than salicylic acid, which in its undissolved condition seems to give rise to local irritation of the fauces and stomach.

Dr. CAVAFY read a paper on a case of Acute Rheumatism treated by Salicylate of Soda, with intercurrent scarlatina and a peculiar skin eruption. The patient, a potman, thirty-three years of age, was admitted into St. George's Hospital under Dr. Cavafy's care on June 1st, 1876, with rheumatism of four days' duration, a previous attack having occurred at the age of sixteen. On admission he was anæmic; nearly all the joints painful, especially the knees and wrists, which were swollen; there was profuse sweating; the heart-sounds normal; urine acid. On June 2nd, the condition being unchanged—temperature, morning 103°, evening 103·8°,—half a drachm of salicylate of soda was given every two hours, from 6 P.M. till 6 A.M. on the 3rd, when the pain was much relieved, occurring only on movement, and the joint affection diminished. The medicine was repeated every two hours, from 2 P.M. till 10 P.M. when he complained of giddiness, and it was ordered every four hours. The temperature fell to 101°. On the 5th he was free from pain, the temperature 98°, the medicine having been continued. On June 7th, slight shivering, headache, and vomiting occurred, the soft palate, uvula, and tonsils were red; the temperature rose to 100·5°. Next day the sore-throat had greatly increased, and a punctate rash, precisely like that of scarlet fever, was seen on the neck and thorax. He complained of great itching and irritation of the arms and legs, which were covered with raised erythematous patches, resembling urticaria, but not evanescent. On June 9th the sore-throat was severe, and pain reappeared in the right shoulder; on the 11th the sore-throat and rash had subsided. The erythematous patches became covered with vesicles, some very minute, others large and confluent, here and there resembling herpes, filled with opalescent fluid. The vesicles afterwards dried up. The rheumatic pains greatly increased, and slight cardiac mischief was noted; the temperature rose to 102·6°; salicylate of soda was therefore again ordered, in doses of half a drachm every two hours. Under this treatment a rapid diminution of the rheumatic symptoms took place, but the eruption reappeared, now extending to the trunk, but the vesicles being much less developed. The treatment was persisted in, and the eruption subsided. On June 23rd, the medicine having been discontinued on the 19th, another rheumatic attack occurred, which again yielded to similar treatment, no eruption now following its use, and no relapse occurring. Dr. Cavafy observed that though the specific action of salicylic acid was well shown by the case, it was an unfavourable one for its employment on account of the repeated relapses, which might be thought to be due to the attack of scarlet fever. But the chief point of interest was the curious vesicular eruption, which was evidently caused by the salicylate of soda. A similar eruption had been observed by Mr. Callender to result from the external application of the acid (Transactions Clin. Soc., vol. ix., p. 9). Tolerance of the drug seemed to have been established, since the eruption did not occur during the third and fourth administrations.

Dr. JULIUS POLLOCK said that he had used salicylate of soda in nearly a dozen cases of acute rheumatism, with almost uniformly good results. In one case only almost no control was exerted over the temperature, which rose to 109° at death. In all the other cases he could speak with enthusiasm of the use of the drug, a rapid diminution of the temperature and of the rheumatic symptoms occurring in from two to four days under its use. According to his experience large doses were not needed; doses of fifteen grains every hour were liable to produce sickness, hence he gave fifteen grains every two or three hours, as seemed needful. In no case did a relapse occur. Most of his cases were subacute, but in one severe case, with pericarditis, the patient was very ill, but from the moment he came under the salicylate of soda rapid improvement occurred. He would very strongly suggest that the remedy was essentially an anti-rheumatic. In one case, which had resisted all treatment week after week, twenty grains of

salicylate of soda, three times a day, gave relief in two or three days. Of the three remedies he had only given salicin and salicylate of soda; with the former he was disappointed, but believed that the latter would take a position in the treatment of rheumatism similar to that of iodide of potassium in syphilis.—Dr. ALTHAUS could not join in Dr. Pollock's enthusiasm. He believed the remedy did great harm in some cases. One case caused him great alarm, a skin eruption, which commenced in a herpetic form all over the face and trunk, evidently being caused by the medicine. The vesicles enlarged, and a condition of pemphigus was produced all over the body. Iodide of potassium was given, and the eruption subsided. Aphthæ on the mucous membrane of the mouth and fauces, and hæmorrhage from the bowels, also occurred in this case. The occurrence of these symptoms, evidently as a result of the employment of the drug, led him to give up the use of salicin.—Dr. WHIPHAM observed that cases of acute rheumatism sent from St. George's Hospital to the Atkinson Morley Hospital nearly always relapsed until the introduction of salicin, from which time cases sent down had a satisfactory result. There appeared to be no difference in the action of the various drugs, all producing a rapid fall of temperature. In one case, salicylate of potash produced headache, dizziness, and noises in the ears, which continued during its use. It was ascertained that the salicylic acid smelt of carbolic acid, and was probably impure.—Dr. ROGERS said that he had used these remedies in nine or ten cases; in one case, in the seventh attack of rheumatic fever, the cure was more rapid and satisfactory than it had been under any other treatment, ten grains of salicin being given every two or three hours. In some of the cases, salicin and salicylic acid produced irritation of the mouth and throat, and had to be left off. He had not observed an evil secondary effect, even where heart disease existed.—Dr. SUTRO thought that in cases of great debility salicylic acid had a strengthening effect; but when the temperature was very high the action of salicylate of soda was preferable, its action being more rapid. The salicylate of soda seemed the safest, but the amount of soda, which was in itself an anti-rheumatic agent, must be borne in mind.—Dr. BROADBENT had treated about twenty cases by salicylic acid and salicylate of soda—not salicin; and his experience was very satisfactory. He had given it according to the method recommended by German writers, in doses of twenty grains alone or with soda, given every hour for six hours on the first day, a similar course on the second, and less frequently on the third. The pain then usually disappeared and the temperature subsided. At first he then suspended the treatment, and relapse occurred, but he found that by continuing the medicine they were avoided. When pericarditis was set up before the treatment was begun, it failed either to relieve or to control the temperature. In one case of post-scarlatinal rheumatism rapid hyperpyrexia set in, and the patient was saved only by iced baths. In one case he had to discontinue the acid on account of giddiness and incipient delirium before six doses had been given, but on giving smaller doses earlier in the day no ill-effects ensued. In another case, on the fourth attack, the rheumatic fever was comparatively removed by six doses, but acute mania suddenly came on. In subacute and chronic rheumatism perpetual relapses occurred, and the medicines seemed much less useful than in well-marked acute rheumatism.—Dr. DUFFIN related a case of post-scarlatinal rheumatism in a girl seven years of age, in which the joint affection appeared on the eighth day of the fever. On the second day the joint affection was very marked, the temperature 103°. Ten grains of salicin were given every hour, and after eighteen doses the pain was gone, and there was great relief. The lowering of temperature was not marked, only half a degree. On the third day, when ten grains were given every two hours, the pain quite disappeared, but the temperature continued elevated. From that time four to six grains a day were given, and no more rheumatic symptoms occurred, but there was no fall of temperature till the sixteenth day of the fever. The effect seemed to be mainly on the pain and affection of the joints.—Mr. GEO. BROWN thought that sufficient attention was not paid to the normally curable nature of rheumatism, and believed that the old remedies, especially alkalies, were fully efficient in its cure, if given in large enough doses.—Sir W. JENNER mentioned a case of severe burn which was dressed with lint soaked in salicylic acid, in which the application was followed by a general copious eruption, which it was thought might be scarlet fever. Dr. Martin, under whose care the patient was, wrote to Prof. Lister and others to inquire whether they had seen a similar eruption from the use of salicylic acid, but could not ascertain that they had. The cases now related would be of value in showing that eruptions do occur from its use. Until lately, in all his long experience, he had failed to find a remedy for rheumatism. He had given drugs, as he had often told the students at the bedside, in deference to the judgment of others, and not because he saw any good from them, hoping that a class of cases would some day appear which might be benefited by them. But until lately he knew of no drug which influenced the course of the disease. In the last three months, however, his scepticism had been shaken, since he had given salicin and salicylates. He had not seen much good from salicin, but several very striking cases from salicylic acid—results which certainly were not found in his previous experience of rheumatism, either when left to itself or treated by other drugs, so that it seemed to him that a case had, at any rate, been made out for salicylic acid and its compounds, for a fair and impartial trial.

OBSTETRICAL SOCIETY OF LONDON.

AT the meeting of this Society held on Wednesday, Jan. 3rd, 1877, Dr. W. O. Priestley, President, in the chair, the report of the delegate to the Philadelphia Medical Congress was read by Dr. ROBERT BARNES, the delegate representing the Society at the Congress. Dr. Barnes, who was elected President of the Obstetric section, expressed his high estimation of the papers read before the section, and his great admiration for the zeal and earnestness with which work was done. He gave a brief sketch of the manner in which the business of the section was conducted, and concluded by expressing his satisfaction with the hospitality and kindness shown him in America.

Mr. GOMER DAVIES exhibited a specimen which was referred to a sub-committee for report.

The PRESIDENT delivered his annual address, which has since been published.

Dr. NAPIER, of Fraserburgh, related a case of Trismus Nascentium. It occurred in an infant five days old. The parents were healthy. It was treated with bromide and iodide of potassium. Great difficulty was, however, experienced in administering medicine and food. The child died. Examination after death revealed no cause for the disease. The cord had separated on the fourth day, and no scratch or sign of injury could be discovered on the body.

Dr. ROPER reported two fatal cases of Pyæmia from Inflammation of the Umbilical Vein, occurring in infants. In the first the only abscess formed during life was situated in the neighbourhood of the right deltoid muscle. The cord had separated on the fifth day, and the skin around it had continued red. The child died on the nineteenth day. After death general peritonitis was found, and the umbilical and portal veins were inflamed and full of pus. The second case presented several abscesses in the wrists and the feet; the right lower limb was gangrenous as far as the hip. The internal organs were healthy, even the liver; and the only lesion found to account for the disease was purulent inflammation of the first inch of the umbilical vein.

Dr. A. W. EDIS related a case of Pyæmia, with extensive purulent deposits, in a new-born infant. A feeble prematurely born child was attacked with pyæmia about the end of the first week of life. Abscesses formed over the right shoulder and in the right lower limb. Death took place on the eighth day. Post-mortem examination revealed local peritonitis, inflammation of the umbilical vein, which contained pus, and plugging of the right femoral vein.

THE RAINFALL IN LONDON DURING 1876.—The total amount of rainfall during last year, as noted by Mr. Steward, of the Strand, was 23·09 in. The number of days on which rain fell was 140. The rainy months *par excellence* were September and December, in each of which rain fell on twenty-one days, and those marked by least rain were January and May. The rainfall in the first twelve days of the present year amounted to 3·40 in.

THE LANCET.

LONDON: SATURDAY, JANUARY 20, 1877.

THE ARMY MEDICAL DEPARTMENT.

In days gone by—in the pre-Crimean epoch—an appointment in the Army Medical Service was much sought after, but from that time to this, with the exception of a brief period following the promulgation of the Royal Warrant of 1858, the department has been unpopular. As we have repeatedly said, the Government has had itself to blame for its policy of "manufacturing distrust," which has been pursued with such success that medical officers have ceased to repose any confidence in Government promises. Many persons will declare the present unpopularity of the service to be mainly, if not entirely, due to the abolition of the regimental system, others will point to mal-administration, and others again to repeated breaches of faith on the part of the authorities, and so on. Such persons forget, however, that breaches of faith are not things of yesterday; that the regimental system was abused by many, the direction by everybody, at all times, more or less, as a matter of course; and that for some years past the competitive examinations have been more or less a sham and a delusion. The truth is that the medical profession is in a very different position from what it once was, that if the Government wants good men it must pay for them, and there are other ways of paying besides giving money; in short, the public services must be made good, honourable services to attract the right sort of men. Look at the almost absolute absence of names of medical officers in the list of those recently decorated with the Star of India on the occasion of Her Majesty being proclaimed Empress of India, and this in the face of the political, sanitary, and social benefits that members of the Indian Medical Service have rendered in that country. Once upon a time the army medical officer had light duties and a pleasant life, his regiment was his home, and his personal influence in it was great, although his rank and pay were both alike poor. Then came the Crimean war, the Royal Commissions, the Warrant of 1858, and the competitive examination epoch. The Horse Guards and combatant officer viewed with jealous eye the medical officer encroaching, as they thought, in the matter of relative rank and honours, on those military rights and privileges which had been traditionally regarded as their own; and the War Office GALLIOS, caring for none of those things, were simply solicitous about the estimates being kept low. To this state of things succeeded the Indian mutiny, the transfer of the military forces to the Imperial power, and a large augmentation to the strength of British troops and medical men in that country. At the same time great changes and improvements in medical education were taking place, and a vast number of appointments for medical men were opening out at home and abroad. The great continental wars, with a new military system, together with the consolidation and independence of the medical services in foreign armies, and the development of the Red Cross societies, followed; and, last of all, came the division of this country into so many military centres or depôt brigades, and the affiliation of the militia and volunteer corps with the regulars. During all this time, too, it must be remembered, assistant-surgeons were growing grey in the service, promotion was blocked and stagnant, and the Warrant of 1858, which had been already shorn of some of its best points, provided no remedy for this state of things. The department resembled a sort of jungle in which progress was impossible, and no direction could succeed that did not clear a way for promotion. Under these circumstances the reorganisation of the medical service was simply inevitable, if the department was to hold its own in the field and compete successfully with other services and with employments in civil life. We had hoped to have seen it occupying a position worthy of a scientific corps charged with the responsibility of undertaking all that appertains to the care of the sick and wounded soldier and the hygiene of the army, but certainly not charged with the duties of storekeepers and purveyors. Had vested interests been respected, and had all new appointments been subjected, in the meantime, to the new rules of its constitution, the department would by this time have unified itself. This was not done, but the change was arbitrarily brought about at a time and under circumstances that could not fail to render it irritating and distasteful. There can be no doubt that as regards personal comfort, social position, and independence, the regimental system was preferable to any other; but would medical officers have been content to sacrifice their material interests—their promotion, for example—for its preservation? and how was the service to be carried on with justice to the limited number of men on the staff available for duty abroad?

We believe, however, that the last and present Directors-General were practically powerless to prevent a radical change, and, what is more, we doubt whether they would have been right, in the interests of the service, to have done so if they could. It has now become the fashion to sum up everything in the curt declaration that whatever is is wrong, and that of course the direction, principle, and objects in view are wrong too. But it is just because we believe the principle and object of the new system to be in the right direction that we have any hope of seeing the wrongs redressed. We adverted recently to some of the gains to the department, and especially to the promotion after twelve years' service, and the compulsory retirement at sixty years of age. By the former the service has been already radically changed, and by the latter promotion to the administrative ranks has been much accelerated. There is nothing that has a worse effect on the character of an officer than his long continuance in a subordinate position; he becomes disheartened and disgusted, and so distrustful of himself from long dependence on the will and judgment of others that he is at last afraid to exercise independence when he possesses it. As regards compulsory retirement, it may be that, here and there, the ruling inflicts a hardship, and it may also be that the State loses the services of a really good and experienced officer, while the country is saddled with an addition to the ineffective list. But, on the other hand, how much greater and more frequent was the hardship in the case of those in the executive ranks compelled to retire at

fifty-five years of age, altogether debarred from the prospect of enjoying the superior income of the higher ranks whilst serving, and the higher rate of pension on retirement. It is surely inconsistent and illogical to lay down that a military chaplain is to retire at sixty, while the military doctor holds on to sixty-five! We regret that something was not done in the direction of an earlier retirement at a somewhat increased rate of pay for those regimental medical officers who were really desirous of going after twenty years' full-pay service, and we think that some provision might have been made for such men in connexion with the militia. We cannot but think that the unification caused by the last Warrant will enable the Director-General to keep medical officers at home stations for a longer time than under the old system, which, in this respect, caused great and increasing discontent; and there cannot be a doubt that, with a consolidated and uniform system, the present ridiculous number of returns and the amount of clerical work must be greatly diminished. Many medical officers urged us years ago, and long prior to its introduction, to aid them in bringing about a change in this direction. The system has not yet been really tried; so far as we can learn it has as yet only been commenced in a tentative way. If it requires modification, then modify it; if it proves radically bad, abolish it; but, first of all, let it be tried.

That there is another side, however, we do not deny. The imposition on medical officers of responsibilities of a very irksome and burdensome character, in connexion with the charge of stores, for example, we regard as a retrograde movement and a great mistake, and we consider the existing relation of the Medical to the subordinate service—the Army Hospital Corps—as another. It would be easy to show that the one involves a waste of energy and a misappropriation of skilled labour, that the other is contrary to the principle of making the medical service responsible for the conduct of its own affairs, and that neither would nor could work well in the field.

The pay of the senior ranks of the department, again, is insufficient, and so far from having improved, it has practically deteriorated of late years. Nothing serves better to mark the estimation in which medical services are held than the fact that the head of this large department has a stipend of £1500 a year, for being, we suppose, the best-abused and hardest-worked member in it, whereas years ago, when the service was nothing like its present size, the annual salary was £2000. A moderately successful general practitioner makes as much.

We must say that we have always regarded promotion for distinguished service in a strictly professional department as a mistake and a just cause of heartburning. That medical officers should be rewarded for such services is undeniable, but the reward should be at the expense of the State, and not of the medical officers passed over. There is, strictly speaking, no real parallel between the combatant and medical officer in this respect: their vocations are quite different. A medical officer should, if promoted, be placed on a supernumerary list, or, in some cases, rewarded by being allowed to count an extra year or two of service or a higher rate of pension on retirement. Of course this should not exclude him from any military honour or distinction usually conferred for such services. There is one regulation, moreover, which has always appeared to us to press with great severity on a medical officer—viz., that of being allowed only six months' leave for sickness contracted in India, at the end of which he must return to his station to complete his unexpired term of service, or go on half-pay. To say that a man who has contracted dysentery, or had repeated attacks of fever, or abscess of the liver, is fit to return to India at the end of six months, is obviously absurd; and while he is labouring under the effects of a disease brought about by the nature of his duties, this ruling is a very harsh one. But we have already exceeded our limits and still left many points quite untouched. These we must reserve for another occasion.

THE meeting of the Pathological Society on Tuesday last may fairly be considered as the most important that has been held since its formation. Although remarkable for being the occasion of a novel experiment in the method of conducting the business of the Society, an experiment which was in every sense successful, it will rather be remembered for the eloquent and suggestive address delivered by Dr. MURCHISON on taking the chair for the first time as president. In that address there was sketched out the direction in which the future work of the Society should lie, and an extension of its field of labour was indicated far wider than its founders could have ever dreamt of. It was as if the Council had determined to declare a new policy in the affairs of the Society—a policy at once bold and revolutionary, but strictly in accordance with the present standpoint of pathology. If carried out, even in part, the present year will see inaugurated a new era in the history of the Society, by the introduction into its business of a larger amount of scientific pathology.

A society devoted to the advance of pathology and numbering nearly six hundred members (of whom but twenty-five are left now to represent the small band that first instituted the Society nearly forty years ago), should exert an important influence on the progress of modern medicine. It is felt to be time that the work of the Society should be directed elsewhere than simply the accumulation of facts of morbid anatomy, which has hitherto formed the chief object of its meetings. The institution of those debates, which for the last four years have enhanced the honour of the Society, was one step in the direction which the Council have wisely decided to pursue; for although, as Dr. MURCHISON pointed out, the mine of anatomical facts may be wellnigh exhausted, we are yet but on the "threshold of pathology."

The pathology of the future will, indeed, rest less upon deductions drawn from the coarser structural alterations exhibited in the body after death than on the study of the morbid processes during life by means of chemical investigation and experimentation. Dr. MURCHISON dwelt with especial emphasis upon the gains to be derived from experimental pathology, a field as yet but little trodden in this country, and, as pointed out in the address, with one or two notable exceptions, not hitherto encouraged by the Society which has the advancement of pathology for its object. We may, then, congratulate the members upon the

announcement made by the President, that the Council had decided to apply to the Royal Society for a grant of money from the fund placed at the disposal of that Society by the Government for scientific purposes, in order to enable the Pathological Society to institute investigations into obscure questions. The subject chosen for the first investigation by a special committee is Pyæmia, Septicæmia, and Purulent Infection, and we have no doubt that the result of the investigation will be of the greatest value. That the Pathological Society should share in the Government scientific grant is only natural, seeing that the fund in question has been formerly applied to scientific investigations in pathology and medicine under the direction of the Medical Officer of the Privy Council. Thus it may be that the apparent loss to science accruing from the abolition of the scientific reports of the Medical Officer to the Privy Council—reports which, under the guidance of Mr. SIMON, attained a far-famed reputation,—will, after all, be a gain, for it may result in researches of the highest importance, which have hitherto been buried in Blue-books, being carried on under the supervision of a Society and submitted to the analysis and criticism of its members, to say nothing of the far wider circulation of these researches among those for whom they are specially intended. This, then, is one direction in which the Pathological Society is invited to work in the future, and it is needless to point out how greatly such an extension of its work will add to its reputation and increase its sphere of usefulness.

The President's suggestion that the Society should further encourage individual workers in experimental pathology by instituting a medal, to be awarded occasionally to the gentlemen who should have communicated the most important results in this department, is one which is worthy of being seriously entertained and acted upon. Lastly, the list of promised contributions to the Society, with which Dr. MURCHISON concluded his address, was at once an earnest of the manner in which the Council desire that the proceedings should be conducted, and an evidence of the advance of pathological research in England.

It is obvious that with the adoption of such a scheme as was here propounded, and the accession of papers on subjects of general and experimental pathology, what has hitherto been considered the routine work of the Society will be in great measure replaced, and a silent revolution will be effected in the mode of conducting business and in the character of the communications brought forward. It is with the prospect of the Pathological Society taking a new departure from the present time that Dr. MURCHISON begins his term of office. But, although the scheme he sketched is admirable in its conception, and will, doubtless, be one day fully realised, yet it can hardly be expected that the Society will suddenly pass from its old and customary method of work into entirely new lines. It may be that time will show the desirability of forming an Anatomical section of the Society, to encourage and keep alive the interest of members in specimens of mere morbid anatomy, which often have wider bearings than simply those of the structural alterations they present. However this may be, the counsel offered by Dr. MURCHISON to exhibitors of specimens should be well weighed by all whom it may concern.

It is not without much satisfaction that we observe the course which matters have taken with regard to this Society, and we may expect great things from the proposed reforms, guided as they will be in their inception by the counsels of the new President.

THE interest which surgeons take in the treatment of the various forms of external aneurism seems to increase year by year. Indeed, the literature of the surgery and pathology of aneurism is now scarcely, if at all, less extensive than that of vesical calculus. Within the last eighteen months an important, and in many respects novel, mode of treating popliteal aneurism has been introduced into surgical practice—namely, the employment of complete temporary pressure by means of Esmarch's elastic bandage. We believe that the only recorded cases, three in number, in which this procedure has, up to the present time, been adopted, have been published in our columns.

The cases were under the care of Dr. WALTER REID, Mr. WAGSTAFFE, and Mr. F. A. HEATH respectively, and were reported in THE LANCET of Sept. 25th, 1875, Sept. 30th and Nov. 4th, 1876; and the account of the examination of the vessels of the first case is to be found in THE LANCET of August 5th, 1876. The aneurisms had existed three months, between four and five months, and three weeks respectively. One is described as being as large as a hen's egg; another is compared in size to a small orange; the third is stated to have been "two inches long, filling the upper half of the space." The elastic bandage was applied firmly from the foot to the ham, then loosely over the ham, opposite the site of the aneurism, and again firmly to the thigh above. It was left on for fifty minutes in two cases, for an hour in the other. Afterwards the circulation in the limb was partially controlled by a compressor on the femoral artery for a few hours as a precautionary measure. As soon as the aneurism was examined after the removal of the elastic bandage, the tumour was felt to be firm and free from pulsation in each case, and then rapidly diminished in size. Such a remarkably successful result in three consecutive cases demands for this mode of treatment the careful consideration of all surgeons. Its advantages appear so great that, if it prove to be safe, and adapted for the majority of cases, its adoption will soon become general. It is rapid in its action, easy of application, requires neither complicated apparatus nor a large staff of assistants, and may therefore be employed in private practice as easily as in hospitals. The period of its application being comparatively short, the administration of ether would be justifiable if the pain which is generally complained of after a short time prove unduly severe. Compression for an hour seems to be quite adequate to ensure complete stasis in the aneurism, and it is well known that the lower limb may be kept bloodless for much longer periods than that without any bad results following.

What, then, is the *modus operandi* of complete temporary pressure? It is evident that in the cases above referred to the aneurisms were kept for an hour filled with stagnant blood, and it is almost equally certain that this blood coagulated in the sacs, and that the coagula extended along the adjoining artery as far as the nearest large collateral branch. In Dr. REID's case it was found after death that

the artery for two inches and a half above the aneurism was obliterated by fibrous tissue, and that the greater part of the aneurismal sac was filled with altered blood-clot, presenting an "amorphous, non-laminated, coffee-coloured substance, of the consistence of cheese, which showed no signs of organisation, or of vascular connexion with the surrounding parts," which consisted of laminated fibrin. This coagulum was doubtless caused by the contact of the stagnant blood with an abnormal tissue—the fibrin inside the sac,—and when once formed, the clot would extend upwards as far as the nearest large branch in the artery. The objects of the ordinary methods of treatment are to lessen the force of the circulation through the sac, and to encourage the formation of laminated fibrin within the sac. The elastic bandage is the only method (except injection of hæmostatics) that confessedly aims at the formation of passive blood-clots. The question is, Which is the better mode of cure, that by coagulation of the blood in the sac *en masse*, or that by the formation of laminated clots?

Since the days of HUNTER surgeons have imagined that the true method of treating aneurism was in some way to fill up the cavity with laminated clot; and they have appealed to the existence of fibrinous layers in cases of spontaneous cure in support of their opinion. To follow as nearly as possible in the footsteps of nature in the cure of aneurism has been the aim and ambition of every surgeon who has bestowed any study and attention on this great subject. To such an extent has this been the case, that the coagulation of the blood within the aneurismal sac is generally designated "passive," because it has been held that blood-clots thus formed take no part in the cure of the disease, whereas laminated clots are termed "active," since they have generally been regarded as the real agents on which the ultimate cure must depend. It is now a question whether our notions of the pathology of the cure of aneurism will not have to undergo very considerable modifications.

There are reasons for believing that laminated fibrin may remain for years without becoming organised or connected with the walls of the sac. WAGNER states that organisation rarely occurs in laminated clots, and that softening is more common. It is, nevertheless, true that if an aneurism be once filled with such clot, it does more or less rapidly diminish in size, and may eventually disappear altogether. Recent investigations have tended to confirm the old belief that the so-called "passive" blood-clots are capable of readily undergoing organisation. LISTER alleges that he has seen organisation occur in coagula on the surface of wounds. Within the bloodvessels the organisation is said to be dependent upon the passage of leucocytes from the vasa vasorum into the clot; the leucocytes are converted into fibrous-tissue vessels, which become connected with the vasa vasorum from within the clot, the broken-up corpuscles are removed by liquefaction and absorption, and the channel of the vessel becomes obliterated by fibrous tissue, which subsequently contracts. Applying these observations to the cases in question, we may infer that the clot formed in the artery above the sac will undergo organisation and obstruct the vessel, subject to the rare accident of absorption of the coagulum before the completion of the organisation process, while in the aneurism itself the fibrinous coagula lining the sac will retard or even prevent organisation. Should any portion of the interior of the sac be exposed and bare, organisation may occur there. But even if no portion of the clot within the sac does organise, the aneurism will be cured if the vessel leading into it be obliterated, because no more blood can get into it. In Dr. REID'S case the clot remained as a granular mass.

According to the evidence which we now possess, it is perhaps justifiable to state that while it is good to have an aneurism gradually filled up with laminated clot, it is probably equally good to have it filled with a rapidly-formed blood-clot extending into the afferent vessel and undergoing organisation there.

The success that has so far attended the employment of the elastic bandage for the treatment of external aneurism has, to say the least, been sufficiently satisfactory to warrant a more extended trial.

MEDICAL STUDENTS will be much concerned to find that certain changes are imminent in the subjects of the Preliminary Scientific M.B. Examination, so that these may be brought into accord with the recent alterations in the regulations for the first examination for the degree of Bachelor of Science. As might have been anticipated at the University of London, they will have a tendency to increase, rather than to lessen, the severity of the ordeal. When we find that the average of candidates who fail at the Preliminary Scientific Examination is above 40 per cent., and that these include many of the best students at our medical schools, we can scarcely see the necessity for raising the standard. If the alterations suggested in the report of the Committee on Examinations in Medicine which was presented to the Senate at their December meeting, and which is to form the basis of the new regulations, were calculated merely to modify, and not to materially increase the severity of the existing examination, we should have no objections to offer. But when the physical part of the examination is to be so changed that not only must the general laws of mechanical and natural philosophy be accurately known, but "an acquaintance with the methods and apparatus" used by experimental physicists be also obtained, a serious addition is made to the labours of the industrious and ambitious student who wishes for the M.D. degree of this University. Physics has been the great difficulty at this examination since its institution in 1859, and the effect of this change will be to necessitate a course of practical study in a first-class physical laboratory, inasmuch as no student will henceforth be able to gain sufficient information by the most assiduous attention to the ordinary courses of lectures only. Provincial students who have no means of access to a good laboratory will obviously be placed at a great disadvantage, and we have heard rumours that even one of our great teaching universities is not sufficiently well furnished in this respect. The medical schools as a body evidently have neither the laboratory nor the apparatus, so that students will have to go elsewhere, or pass this examination before entering on their special studies. That the slightest increase in the severity of the examination in experimental physics must have a very great effect in increasing the already large number of failures is obvious, for at the examination in

July, 1875, no less than 26·5 per cent. of the candidates who presented themselves were rejected in Mechanical Philosophy, and 17·3 per cent. in Natural Philosophy. Surely the present standard is sufficiently exacting to enforce the acquirement by medical candidates of such *definite physical conceptions* as are necessary to prove the soundness of their general education, and their capacity for making a proper use thereof whenever requisite in their subsequent careers.

Another important innovation, and one in which we cordially concur, is the substitution of a real examination in Practical Biology instead of the present arrangement. Candidates will be required to examine microscopically, to dissect, and to describe specimens of plants and animals, instead of merely identifying the latter, as is now the case in the so-called practical examination in Zoology. The Chemistry programme will remain unaltered. Another important change consists in the withdrawal of the permission to those candidates who have passed the first M.B. examination without having passed also in the pure mathematics of the first B.Sc. examination, to proceed to the second B.Sc. examination. This will necessitate every future Bachelor of Science passing in pure mathematics, and is sure to lessen the number of medical aspirants for that honour. To aid in working these innovations the examiners in Physiology will no longer act also as examiners in Comparative Anatomy and Zoology, and two additional examiners will be appointed for these subjects.

Annotations.

"Ne quid nimis."

THE ARCTIC EXPEDITION INQUIRY.

WE may fairly assume that the Committee appointed by the Admiralty to inquire into the causes of the outbreak of scurvy will exhaust the subject in all its details. If our predictions are verified, and the obvious course indicated in THE LANCET of last week be pursued at the commencement, the proximate cause of this particular outbreak will soon be brought to light. Whether this be the case or not, it seems to us that so good an opportunity for a comprehensive "threshing out" of the subject should not be missed. Many of our own profession, misled, in common with the general public, by the polyglot aspects that the "lime-juice" discussion has been ingeniously made to assume, have had their faith in the antiscorbutic properties of vegetable food sorely shaken. For if, during the last half-century, one point in prophylactic and curative medicine seemed to be more firmly established than another, it was that vegetable food prevented and cured scurvy, and that at sea, or in fact anywhere, when exceptional circumstances require exceptional arrangements, lime- or lemon-juice was the best and most convenient form in which vegetable food can be administered. Its use revolutionised the sanitary arrangements of the navy towards the close of the last century; its presence or absence determined, to a very marked extent, the amount of scurvy among the French and English armies in the Crimea; and since the quality and quantity of lime-juice dispensed in the merchant navy of the kingdom have been assured by legislation, the disease has diminished among our sailors about 80 per cent. These facts, as well as the physiological aspects of the question, so ably enunciated by Parkes, Budd, Buzzard, and others, have been so often quoted, and so often emphasised by practical experience and by official inquiries conducted under the auspices of the Board of Trade, that they are more than a "thrice-told tale," and can hardly want reiteration. But, as we remarked last week, let us have evidence on the subject other than that procurable from Admiralty witnesses. There are many men in our profession who, fortunately for mankind, and thanks to the progress of science, have never seen a case of scurvy; and there are many ship-masters, also, who are equally ignorant of the disease, not because circumstances have been unfavourable for its development, but because these circumstances have been anticipated, and properly, skilfully, and carefully provided for. By circumstances we mean protracted passages, monotonous but not bad diet, cold and wet, bad water, and high as well as low temperatures. There are men now in London, who have given up the sea, but who have commanded ships of all classes in most parts of the world, whose evidence would be invaluable. For we must recollect that when the origin of the Arctic outbreak has been fully and finally settled, it will be the duty of the aforesaid Committee either to bring to an anchorage again our "antiscorbutic" beliefs, or to send us away on a fresh prophylactic exploration.

MISTAKEN POLICY OF POOR RELIEF.

WHY insist on the removal of necessitous persons into the workhouse when they require a small weekly allowance in relief of their poverty? There is surely a fallacy in the reasoning which conducts social economists to the conclusion that these arbitrary measures of Poor-law administration are politic. In some—possibly in certain districts a fair percentage of—cases, applicants for out-relief may be driven from the board-room when an order for "the house" is officially shaken before them *in terrorem*, but this scarecrow business has its limits. There are poor old people, of both sexes, who may be intimidated in this fashion, just as there are children in the street who may be induced to shrink out of sight and starve quietly in the gutters if the policeman on the beat is duly impressed with the duty of enforcing the stern views of some charity organiser or doughty opponent of indiscriminate almsgiving. Unfortunately, however, it generally happens that the most impressible of paupers and *gamins* are not those of whom society is especially desirous to rid itself. The genuine parasite is not in the smallest degree disconcerted by the measures adopted for his repression. He meets the manœuvre with modest ingenuity. If they persecute him in one county or parish he migrates to another, and so, while the hobby-riders of one shire or union are making merry over their achievements, the enemy who is supposed to have been ridden over and crushed is fattening on the weakness of a neighbouring administration. And if all the boards of guardians throughout the United Kingdom combined, that pest of civilisation, the hateful and hereditary pauper, would probably come out in a new *rôle* rather than consent to die and relieve society of his incubus. In a word, relief means the same thing and works the same evils all the world over, and nothing is gained by changing the name. It follows that as little as possible should be doled out to the predatory pauper, while the really necessitous are ungrudgingly helped. As a matter of simple economy we believe it would be better to allow the aged poor a suitable allowance out of the workhouses than to crowd them into these establishments, undertaking their entire support, and necessitating the maintenance of a costly organisation. For the sick poor we need well-provided workhouse infirmaries, where the maladies which pauperise the humbler classes and throw their families, too often permanently, on the rates, may be

promptly and efficiently treated. For the casual poor we must have some sort of shelter. For the able-bodied who are out of work we should like to see State workshops, where every penny bestowed was first honestly earned. Meanwhile, the aged poor, the incurably sick, except those who are imbecile and stand in need of constant attendance, might with advantage be relieved in their own homes and families. The movement against "out-relief" is mistaken; it is the conceit of men whose knowledge of the practical working of the system they are seeking to enforce is derived from the study of Blue-books and local reports, a sorry way of striving to solve the mystery and assuage the misery of distress as it dogs the footsteps of those born in poverty. The curse of want, cruel and enervating, combined as it generally is with debilitating or dementing disease, must be followed to its haunts and viewed at close quarters, or it cannot be understood. An organised system of house-to-house visitation by officials appointed by the Local Government Board is the only sufficient means of distinguishing between the worthy and unworthy objects of public charity and apportioning the relief ministered to individual needs. It is very humiliating to read the nonsense written by men who have no practical acquaintance with this subject, and disquieting to find it is accepted as of some authority by those who, although armed with a power of intervention, are no better informed.

QUEEN CHARLOTTE'S HOSPITAL.

IN another column will be found a letter from Mr. Charles Hawkins, in which are detailed certain facts relating to the Queen Charlotte's Lying-in Hospital. The mortality of this institution appears to be excessive, the death-rate ranging in the past twenty years from 8·8 per 1000 as a minimum to ten times that amount as a maximum. Between the years 1857 and 1865 the average death-rate was 40·31, and at this date the hospital was closed for the purposes of cleansing and enlargement. The good effects of this step at once became manifested in a greatly reduced mortality, and for the six years 1866–71 the average death-rate was 15·35 per 1000. The year 1872 was marked by a great deterioration in the sanitary condition of the institution, and the death-rate rose to 27·71. From that time to this the mortality has continued to be excessive, the five years 1872–76 giving an average death-rate of 30·51, while the rate for the year 1876 reaches the alarming figure of 45·67. In other words, 1 out of every 22 patients admitted during the past year has died; and this figure, great as it is, does not, as Mr. Hawkins suggests, probably represent the true mortality, since no account is taken of patients who may have sickened there and died elsewhere. The hospital, as we understand, is at present closed.

Looking through the records of the Lying-in Hospital at Dublin for the 116 years comprised between 1745 and 1861, we find that the average mortality for the whole period was 12 per 1000, and that the year of greatest mortality was 1819, when the death-rate was 27 per 1000.

The Queen Charlotte's Hospital has, during the past twenty years, only twice had a death-rate below that of the Dublin average, but has on nine occasions exceeded, and once nearly tripled, the Dublin maximum. These figures are truly lamentable, and afford a melancholy comment on our boasted advances in the matter of hygiene. The public, who are asked to support the institution, have a right to know what causes have mainly conduced to its unhealthiness, and the committee will do well to institute a formal inquiry, which should be held by persons who are in no way connected with the hospital. It is evident that either the building or the management is at fault, and it is of great importance to know which.

For the present we can only express our satisfaction that the hospital is closed, and that the poor women in the neighbourhood are safe from its delusive charity. We trust that it will not be reopened until the causes of its high mortality have been elucidated and removed.

THE ASSISTANT-PHYSICIANSHIP OF ST. GEORGE'S HOSPITAL.

A VERY spirited contest for the assistant-physicianship of St. George's has ended in the election of Dr. Herbert Watney. Dr. Watney had 228 votes, Dr. Robert James Lee 122, the majority for the former being 106 votes. In no former election has the successful candidate scored 130 votes. This fact shows how deeply the interest of the general body of governors had been stirred in the matter, and must be taken as a complete condonation of the action of the medical staff, who unanimously took the exceptional course of publishing a testimonial in favour of the successful candidate without the consent of the Weekly Board. This course was inconsistent with one of the rules of the hospital, but this fact was not known at the time to the medical staff, and the action did not involve the disqualification of the candidate in whose favour it was taken. One feature of the contest was very remarkable, and certainly not commendable. Several medical men actually not governors of St. George's Hospital, and on the medical staff of other hospitals, thought it right to allow their names to appear as part of a committee for promoting the election of a candidate. All show of interest in an election to a hospital post should be preceded by the gift of either money or service to the institution. The action of the medical staff of St. George's is one which may easily be justified, for they are intensely interested in all that makes for the efficiency of the institution, either as a hospital or as a medical school; and they are specially qualified to judge of the fitness of candidates. But the mode of election should be such as to secure consideration for the views of the medical staff, and to render the publication of these views unnecessary. Such a change has been made in several provincial hospitals, and should be made in all hospitals. Dr. Watney, the successful candidate, has done excellent work as demonstrator of minute anatomy, and has written a paper which will shortly appear in the Philosophical Transactions upon the structure of the intestine; and though it would be difficult for us to judge in this matter between him and his rival, Dr. Lee, it is impossible to deny that his work justifies the high opinion his colleagues have formed of him.

A SWEEPING CHANGE.

THE second annual meeting of the Birmingham and Midland Association of Medical Officers of Health was held lately in Birmingham, under the presidency of Dr. Hill, whose term of office then expired. His successor for the ensuing year, Dr. Wilson, delivered an address on the Relations of General Medical Practice to Preventive Medicine. The president dwelt on the vast saving of life and health which may be achieved by well-directed efforts to prevent disease, much of which medicine is powerless to cure, and pointed out the incongruity that while preventive medicine, whether in its legislative or social aspects, owes all its success to the medical profession, the teaching of it is practically ignored in the medical schools, and the practice of it is detrimental to the pecuniary interests of the profession. Dr. Hill then described how, in his opinion, curative and preventive medicine should be made to go hand in hand for the promotion of the public health and the abatement of human suffering. All that is required in bringing about the change in practice, he contended, is that the ordinary medical attendant

should be paid by an annual stipend, and not according to the number of visits he may make during illness. The advantages of this change of system were enumerated as follows:—In the first place, the practitioner would advise his patients concerning the sanitary condition of their houses; in the second place, he would advise them against any bad habits or against errors in diet and clothing injurious to health; thirdly, he would make it his duty to call from time to time without being sent for, and would thus be able to detect "ailments in the bud"; and, lastly, he would take every needful precautionary measure in cases of infectious disease, and would have no scruples in giving timely information to the officers of the sanitary authorities. The innovation advocated by Dr. Wilson has much theoretically to recommend it, but we do not think there is any likelihood of its speedy adoption in this country. The British public would require a good deal of preparatory education before the merits of the system could be made apparent to and be appreciated by them.

A CASE FOR THE CROWN.

MICHAEL M'CONNOR, the soldier condemned to death for the murder of a comrade in a cell, both the deceased and the prisoner being drunk at the time, ought not to be hanged. This is a bold statement, but it rests on valid grounds. Setting aside the legal question whether the coat of the deceased having been removed, and without damage, it is not fair to presume that the two men fought, in which case the crime would be reduced to manslaughter, there is the question of policy involved. A drunken man is for the nonce an infuriated animal. If several wild beasts are shut up together in a cage, and one is found killed, some measure of blame must certainly attach to the keepers of a managerie so conducted. We confess it is difficult to suppose the Secretary of State for War will not himself feel the force of this argument, and although, of course, the administrative question must be one for the consideration of the Commander-in-Chief—not the Secretary,—Mr. Hardy may be trusted to use his influence with his colleague at the Home Office to avoid the scandal of a capital punishment for an offence committed under circumstances so reprehensible. A soldier who drinks to excess is especially likely to become possessed with an ungovernable impulse of passion. His mode of life is of a character, both as regards discipline and liberty, to favour the production of periodic outbursts of rage. This is one reason why the crime of drunkenness needs to be punished with exceptional severity in the army. Meanwhile, the same consideration clearly suggests especial care for the safe keeping of men while under the influence of intoxication. The service regulations distinctly recognise the necessity for unusual precaution. Nevertheless, here we have an instance of drunken men thrust together into the same cell, without the slightest protection or safeguard against mutual injury. In the face of the entire absence of motive for this crime, and the peculiar and publicly discreditable circumstances under which it was committed, we cannot but assume that the condemned man will be reprieved, and the offence punished as one of manslaughter.

NURSING BY SUBSTITUTE.

THE evils attendant upon the artificial rearing of children are so great and so well known to the profession that it is not a little surprising the custom continues so fashionable. Instances of permanent injury to health, and even of death from this cause, daily come under the notice of medical men, and every now and again the mortality amongst nurslings brought up in this manner attains such magnitude as to be perfectly appalling. Fraught with evil as is this custom, it is, nevertheless, one that is adopted not as a matter of necessity only, but is frequently had recourse to as one of personal convenience simply. It is not so rife amongst the poor as it is among the well-to-do and fashionable; for many, indeed, of the latter class, who are in every respect, except intention, well qualified to become good mothers and nurses, delegate their natural duties to a wet-nurse or even to a feeding-bottle. It can hardly be believed that such conduct is the result of a full knowledge of the issues at stake; were it so, the conduct of many mothers, who, for the sake of preserving their figure, or of enjoying the excitement of the ball-room or the theatre, transfer the privileges of motherhood to a third party, or things, would be unnatural and inhuman. In this matter, as in many others, two Royal ladies have in this country set an example which it is hoped will be generally followed. Upon it depends in great part the future of the race. The duty of medical men with regard to this practice is in most cases clear, and they should not shrink from it. However unpalatable the truth may be, no vain excuse should be allowed to weigh with them and deter them from insisting, in so far as in them lies, on the mother nursing her own offspring. Nothing can fill for the child the place of its mother's milk, and nothing can replace the effects of nursing for the maternal system—effects which are essential to a natural return to a healthy condition after pregnancy. It cannot but be believed that were mothers aware of the magnitude of the evils arising from abstinence from nursing, not only to their infants but to themselves, much less would be heard of the bottle and the endless variety of patent foods with which it is filled, and much more of that natural food which is the rightful property of the infant—the mother's milk.

"A PRIVATE DISSECTING-ROOM."

THE attention of the City magistrates has been drawn during the past week to Mr. Thomas Cooke's private dissecting-room, which has been recently removed to New Bridge-street, Blackfriars, from Stamford-street. The occupier of the adjoining house had applied to the City sanitary authorities to procure the abatement of the nuisance, and, finding that they had no power to interfere, asked the assistance of Sir Benjamin Phillips, the sitting magistrate at the Guildhall. From the report in the daily papers, it would seem that Sir B. Phillips was very ready to give any help that lay in his power. He at once sent an officer of the court to inspect the premises, and, on his report, not only said that he would grant a summons, but that if the expense deterred the applicant from indicting the owners or occupiers as a nuisance, the City authorities must take up the case. It is sufficiently obvious that popular objections against the idea of a dissecting-room and its contents being next door neighbours to one would be very strong, and we can only regard Mr. Cooke's want of consideration for public opinion as rather unfortunate. It would be absurd to consider a dissecting-room detrimental to health, but it has objectionable features, and should be detached from other premises, have a private entrance, and not be a house taken promiscuously in a public street. In the latter case, in addition to many other objections, it is almost impossible to ventilate it sufficiently, and without offence to those who live adjacent, and at the same time to screen the operations that must be carried out therein from the prying gaze of curious neighbours. Moreover it would appear that the bodies were by no means too well disinfected, for the smell in the upper storeys seems to have been very marked. Surely the Inspector of Anatomy must have inspected the premises, and reported on their suitability before the authorities at the Home Office gave Mr. Cooke his licence to practise anatomy therein, and the questions of due venti-

lation and seclusion from non-professional on-lookers must have crossed his mind We can only regret that such a case should have arisen, as it will necessarily attract a certain amount of curiosity to the well-regulated dissecting-rooms in our medical schools, and make the lay public suspicious of the character of the Anatomy Act.

THE REGISTRATION OF HONORARY DIPLOMAS.

THE General Medical Council seems to be in an awkward position as regards the registration of honorary diplomas. Mr. Richard Eustace, M.R.C.S. Eng., 1853, occupies a high position in the navy, and has received the Blane medal of the College of Surgeons. The Queen's University of Ireland has conferred on him its honorary degree of M.D., and the Council has declined to register it. Now honorary degrees differ from others essentially in not being paid for. They differ from others too in being granted without examination. But since the establishment of the Council honorary degrees have been registered. Thus Dr. Acland, the late Dr. Rumsey, and Dr. Paget are all registered as graduates of the University of Dublin, from 1867. They are not described in the Register as honorary graduates, but nobody believes that these distinguished gentlemen went through any examination to obtain their degrees. The Fellowship of the College of Surgeons is enjoyed by many who have not passed the examination, but paid an additional fee, and these Fellowships are registered. So, some years ago, one of the Royal Colleges, in a benevolent mood, granted its licence to many medical men for a certain sum without examination. And we have never heard of any difficulty in regard to their qualifications being registered. It seems a most invidious distinction, that while members of the Council receiving honorary degrees may have them registered, a gentleman not a member cannot; or that an honorary degree from the University of Dublin may be registered, but not one from the Queen's University. Such inequalities are unintelligible, and we are not surprised to hear that they are likely to be submitted to legal tests.

ALCOHOL IN HOSPITALS.

IT has been announced that the medical staff of the Dorset County Hospital have lately discountenanced, as far as possible, the use of alcoholic stimulants as medicines, and that in consequence the annual cost for wines and spirits had been reduced from £143 to £43. There can be no question that the good which is to be done with alcohol in the treatment of disease should be done with the minimum that is needful, but it is important that this employment of a minimum should not be advocated on false grounds. Alcohol may be regarded purely as a medicine, and, like most other substances which are administered in disease, there is no doubt that an excess considerably beyond the needs of the system does harm. But in the use of alcohol as a medicine it must be remembered that, according to the balance of scientific opinion, alcohol is a food as well as a stimulant, and the reduction in the amount of it may necessitate a supplementary increase in the amount of food. We do not believe that alcohol is given in excessive quantities in our hospitals. Advocates for temperance hospitals forget that a large proportion of cases of acute disease in our general hospitals receive no stimulants. They do not need alcohol, and are treated throughout without its aid. There is probably not a general hospital in London which could not furnish statistics of the non-alcoholic treatment of disease quite as favourable as those which have been issued by the so-called "Temperance Hospital." But no one who has watched the course of severe acute disease in large towns can doubt that the mortality in such cases would be at once doubled by the withholding of alcohol. It must not be forgotten that the results in a provincial hospital, such as that at Dorchester, cannot be applied to hospitals in large towns. It is the common conclusion of those who have had opportunities of comparing the treatment of the sick in rural districts and in London, that the sick poor in the country neither need nor bear the amount of stimulation which in London is indispensable in the treatment of severe acute diseases.

KNIGHTSBRIDGE BARRACKS.

THE demolition of the old cavalry barracks at Knightsbridge has effected an immense improvement in the general appearance of the part of the park in which they were situated. The eye is no longer pained with the appearance of squalor and dinginess, nor the nose offended with the reek of over-crowded stables. We hope before the reconstruction of these barracks is undertaken by the Government, one final effort will be made to induce them to reconsider the determination arrived at last session. Unless military considerations are imperative, barracks, both from an æsthetic and a politic point of view, are undesirable adjuncts to our parks. It was clearly shown last year, both at public meetings and in the Parliamentary debates on the subject, that professional opinion was divided upon the question of the necessity of retaining troops in the neighbourhood of the parks. Lord Sandhurst was decidedly in favour of their removal, and in this he was supported by other eminent military authorities. But even admitting the plea of necessity, the question of reconstructing the barracks on their present site in the park has still to be met. It has been repeatedly urged that the space available at that spot is far too contracted for the construction of barracks fulfilling satisfactorily the sanitary requirements that science and experience have taught us to be so necessary for the healthy maintenance of our troops, and the objection has been admitted by all practical sanitarians. The old barracks, when first constructed, were intended to hold far fewer men than the military authorities have since seen fit to cram into them. To rebuild barracks for increased numbers on a contracted site, which, even in the days of sanitary darkness, was considered sufficient for only a very limited number, is a folly which we hope the Government will be persuaded, even at the last moment, not to commit. Alternative sites, which afford ample accommodation, are available either within the precincts of the park itself or in its immediate neighbourhood.

THE PRIMARY AT THE COLLEGE.

SOME time since we hinted that the number of the examiners might be with propriety increased. An instance of the truthfulness of the remark, we may safely allege, occurred on Wednesday last. Owing to the extraordinary number of candidates, the staff of examiners had not only to examine all the afternoon, from 12.30 till 4.30, but after an interval for refreshment they were required to meet again, and further conduct the examination until 10 P.M. Young and ardent as most of them are, human nature must have its sway, and we cannot help thinking that candidates submitting themselves on that evening can hardly have had the justice done them which has been experienced by those who have undergone the ordeal in the afternoon. In older days, the various idiosyncrasies of examiners, physical and mental, developed themselves ere the stroke of four, and irritable bladders and enlarged prostates, and anxiety either for dinner or attention on patients, had a marked influence on a candidate's chance of success. We should be sorry under the new *régime*

to hint at any converse as regards attention on private practice, but we may well surmise some little misgivings on the part of the examiners themselves as to whether after—well, let us say six hours' hard work, the candidates experience the full benefit of the discrimination of the nine anatomists and physiologists. It amounts to hearing a lesson over and over again, and as the lesson proceeds, physical fatigue must influence even the most practised system.

SALICYLIC ACID AND SALICYLATES.

THE very interesting discussion, if such it can be called, at the Clinical Society, on the use of salicin, salicylic acid, and salicylates, in the treatment of rheumatic and other fevers, shows how rapid has been the adoption of these comparatively new remedies into the pharmacopœia of our leading practitioners. The very remarkable consensus of opinion as to the value of salicylates in rheumatic fever is the more important, as it comes from those who have the reputation of being slow to adopt new things on account of their novelty, and especially when such men as Sir Wm. Jenner concur in its praise. Those who know how multiform a disease acute rheumatism is, and how variable is its course under any and every treatment, are the slowest to adopt with enthusiasm any new specific in its treatment; but there can now be little question that salicin and salicylates, especially the latter, do exert an influence in its cure which is quite peculiar to them. An interesting field of inquiry yet lies open as to their mode of action, and their value in other acute and chronic febrile diseases. Dr. Weber's cases of other fevers were too few to warrant any decided opinion on the latter point. Meanwhile the discussion at the Clinical Society marks an era in the history of practical therapeutics.

PROVISION AGAINST SMALL-POX.

IN view of the wide prevalence of small-pox, the Guildford Urban Sanitary Authority is wisely adopting measures for dealing effectively with the disease, should it visit Guildford. The medical officer of health for the district, Dr. Morton, with a thorough appreciation of the danger involving a community in which a single case of small-pox is not promptly isolated, suggested to the authority the desirability of procuring a vehicle which could be used as an ambulance for the conveyance of infectious cases, should the disease be imported into the locality, and also a small house or cottage for the reception of possible patients. Some little objection on the score of economy was urged against these suggestions, but the majority of the members showed an earnest desire to co-operate with the medical officer, and it was decided to carry out his recommendations without delay. Similar provision against the importation of small-pox should be made in all towns and villages. Sanitary authorities will find it the cheapest step in the end.

UNIVERSITY OF LONDON.

A MEETING of Convocation of the University of London was held on Tuesday, the 16th inst.; Dr. Storrar, Chairman of Convocation, presiding. The meeting was not very fully attended, the number of medical graduates present being especially small. This paucity of attendance on the part of the medical graduates may in some measure be explained by the fact of there being no motion directly affecting this section of Convocation on the paper; at the same time we should like to see them take more interest in the proceedings of Convocation, which is left largely in the hands of the members of the bar. The business involved the rejection, by 57 votes against 15, of a motion by Mr. A. Hensman, urging the appointment of a special committee of fifteen members of Convocation to inquire into the necessity for changes in the constitution of the University, &c. Mr. Tyler, B.A., moved that animal physiology be reinstated in the examination for the B.A. degree. Dr. Bucknill seconded the motion, which was opposed by Dr. Hilton Fagge, and then withdrawn. On the motion of Mr. S. Buss, it was resolved, in a small house of thirty-seven members, and by a majority of seven votes, to refer to the annual committee to consider and report on the best means of carrying into effect the desire of Convocation that the degrees of the University should be open to women. Drs. Grailly Hewitt and J. C. Bucknill strenuously opposed the motion.

INTERNATIONAL RECOGNITION OF DIPLOMAS.

IT is evident that unless we show a disposition to recognise French, or the best of French, diplomas we may have some legislation in France that will be most cruel to English invalids wintering there, and very unpleasant to English medical men, who, on the score of health or inclination, practise abroad. From what quarter should the indications of this disposition first appear? The position of the question in France, and the disposition of the French Minister, suggest that Government should take the opinion of the General Medical Council, without delay, as to the right course to be pursued. The difficulty is easily stated. The Council can supervise examinations conducted in Britain, and if they fall below a certain standard can complain, or even move the Privy Council to order that the qualifications of any examining body acting ineffectively or unsatisfactorily shall not have a claim to registration under the Medical Act. In regard to the examinations of foreign countries, supervision would be difficult. But it would not necessarily be impossible. It would be quite possible, at any rate, for the Council to satisfy itself of the character of the examinations for certain foreign qualifications, and to recognise them while they are found satisfactory. An International Commission would be the best, because the completest, way of elucidating the subject. But this might not easily be obtained, and meantime the question presses between France and England, and should be considered in a spirit of liberality worthy of two near and friendly nations, and of the members of a liberal profession. Meanwhile we ask the legislators and medical men of France to remember that, at present, a graduate of any respectable university in France may practise without molestation in England, even in the present state of the law.

DESTROYING "MAD" DOGS.

IF a dog which has bitten somebody is instantly destroyed, the person who has sustained the injury, or his friends, must go about in dread of bad consequences; whereas, if the dog had been spared, events might have cleared away the misgiving, the animal, perhaps, being only excited, not "mad." The practice of impulsive slaughter is as wanton and unintelligent as can well be conceived. When a dog is suspected of hydrophobia the aim should be to secure him, which can generally be accomplished with a large sack or net thrown over the animal, or in such a way that he may be entangled and fall. He should then be placed in safe custody; a back yard with high walls will do if no lock-up shed or stable is near. With a liberal supply of food and water many a "mad" dog would quiet down and prove either to be suffering from epilepsy, or, possibly, distemper with convulsions, perhaps worms. Dogs are infested with tenia and other internal parasites. It is mischievous to create panics and give cause for anxiety by destroying the only evidence from which comfort and reassurance to the bitten person can be derived.

THE CLINICAL SOCIETY.

THE annual meeting of the Clinical Society was held on the 12th inst., and was attended by a large number of members of the Society. A vote of thanks to the retiring President, Sir W. Jenner, was gracefully proposed by Dr. Patrick Stewart, who dwelt on the impartiality, dignity, and ability with which the meetings of the Society had been conducted, and the honour reflected upon the Society by the presidency of so distinguished a physician. The vote of thanks was seconded by Dr. Broadbent in a few well-chosen words, and very heartily agreed to by the meeting, who showed that they regarded it as no mere formal vote. A vote of thanks to the Council and the retiring vice-presidents was proposed by Mr. Richard Barwell, and seconded by Dr. Hermann Weber.

The list of officers elected for the ensuing year was as follows: — President: G. W. Callender, F.R.S. Vice-Presidents: H. Davies, M.D., C. Murchison, M.D., LL.D., F.R.S., H. Thompson, M.D., R. Barwell, T. Bryant, C. Heath. Treasurer: E. H. Greenhow, M.D., F.R.S. Council: H. C. Bastian, M.D., F.R.S., G. Buchanan, M.D., A. Clark, M.D., D. Duckworth, M.D., C. H. Fagge, M.D., T. H. Green, M.D., J. B. Hicks, M.D., F.R.S., A. J. Pollock, M.D., R. Southey, M.D., C. T. Williams, M.D., W. H. Brace, M.D., F. J. Gant, J. W. Haward, W. MacCormac, F. H. Marsh, A. B. R. Myers, M. W. Rice, M.D., J. Rouse, E. Venning, J. S. Wells. Honorary Secretaries: W. Cayley, M.D., T. P. Pick.

MEDICAL EVIDENCE IN COURTS OF JUSTICE.

WE are reminded by an article in the *World* of the 10th inst., and by the evidence adduced in a case of manslaughter tried at the Central Criminal Court on the same day, of the very grave responsibilities incurred by medical men who give evidence in a court of justice, whether in civil or criminal cases. Our facetious contemporary deals with the former class only, and inveighs powerfully against the practice that has for a long time obtained of pitting medical men against each other in railway compensation cases. We do not care to discuss the assertion that "specialists in evidence-giving" and "habitual medical witnesses" exist, that it has become a distinct branch of professional work, and that "men of honour and reputation feel a natural repugnance to engage in any kind of contest with such adversaries, and protect themselves by declining to go into court." We have frequently had occasion to allude to this subject, and it is unhappily too true that the public belief in medicine and surgery as a science has been seriously weakened by hearing or reading the "witness-box" evidence of two or more eminent men called to testify to the degree and permanency of a railway injury. The *World* suggests a remedy which is undoubtedly worthy of consideration. It proposes in such cases that a report upon the case should be prepared by independent medical assessors, to be nominated by the judge. It must be remembered that, under present circumstances, the plaintiff or defendant (as the case may be) now and then defeats his own cause by forcing into the witness-box a medical man who has declared that his evidence would be unfavourable to the side for which he was subpœnaed. Anyhow, it is discreditable to the profession that these occasional scientific tournaments should ever occur in a court of justice.

The evidence to be given in a criminal case is, however, of a far more responsible character, and in this class of cases the giving evidence is not a matter of choice. It cannot, therefore, be too emphatically impressed on the mind of a medical witness not to go into court with a half or incomplete knowledge of the scientific facts of the case. The importance of this was very clearly instanced in the case above referred to. Mr. J. J. M'Andrew, of Limehouse, gave evidence to the effect that a bloodvessel had been ruptured, and that there was a small fracture at the base of the skull. "If he had not seen the head, and had only examined the heart, he should have believed the man had died from heart disease." Mr. Justice Hawkins, before whom the case was tried, dwelt particularly, in his summing-up, on the medical evidence, and said that when a medical man is summoned to a case where death is supposed to have occurred from violence, it is his duty to insist upon, or to make, an exhaustive examination of all the organs before giving evidence either at an inquest or a trial. We believe, however, that in all such cases this work, as a sort of specialty, would be more satisfactorily performed by a medical assessor attached to the coroner's staff.

NATURAL SCIENCE SCHOLARSHIP, GONVILLE AND CAIUS COLLEGE, CAMBRIDGE.

AN examination will be held at Gonville and Caius College, on Tuesday, March 20th, 1877, and the three following days, beginning at nine o'clock, when three scholarships, at least, will be offered for competition; one of which, with no restriction as to age, will be awarded for proficiency in Natural Science. The scholarship will be of the value of £60 a year, and tenable for two years, after which time the holder will be eligible to a scholarship, the tenure of which, in case of sufficient merit, is prolonged until the holder is of standing to take the M.A. degree. Candidates will be examined in Chemistry, Chemical Physics, Zoology with Comparative Anatomy, Physiology, Botany and Geology. *Excellence in one or two of the above subjects will be preferred to a less perfect acquaintance with a greater number.* Each candidate for this scholarship will be required to furnish a list of those of the above subjects, in which he desires to be examined, at least three weeks before the examination.

SANITARY CONDITION OF THE WAR OFFICE.

IN consequence of the unauthorised statements which have been published regarding the sanitary condition of the War Office, Her Majesty has commanded a Commission to inspect the premises, and report thereon. The Commission, consisting of Sir William Jenner, M.D., Sir W. W. Muir, M.D., Chief of the Medical Department of the Army; Dr. Seaton, and Mr. Noel, M.P., (who was accompanied by his secretary, Mr. Mitford), visited the two houses on Wednesday. On Saturday, the Commission will again assemble and make a final inspection of the buildings, after which a report will be drawn up and presented to Her Majesty. It would be premature to offer an opinion on the probable issue of the investigation; the names composing the Commission are, however, a sufficient guarantee that the work will be ably and thoroughly performed.

DANGER OF FUNERALS.

IT is not long since our attention was drawn to the development of a movement in America, chiefly confined to the medical profession, having for its object the better and safer management of funerals. The promoters had collected data which tended to demonstrate the possibility of disseminating infectious diseases by means of the last ceremony, and we are bound to say they made out a case that was far from weak. It appears that the Health Board of New York have now issued a circular recommending that no public or church funerals should be given to persons dying of either diphtheria, scarlet fever, measles, or whooping-cough. The medical press would seem to approve

of the proposal, and supplement it with a further suggestion that the family of the deceased should be compelled to publish, with the announcement of the death, the particular contagious disease of which the patient died, so that there should be the least possible danger with private funerals.

CONVICTION OF A "MEDIUM."

IT is satisfactory to know that after alluring the weak believers in spiritualism, by pretending to powers which no man can possibly possess, a professed "medium" cannot escape the charge of obtaining money under false pretences, by alleging that his dupes came to inquire. No man in his senses believes that people who squander money at *séances* go to seek truth. They frequent these places because they are deluded. A scientific investigator, if any such person could be supposed to feel curiosity as to this "craze," would not repair to a medium for enlightenment. These adventurers are simply trading on the credulity of the public, and the "sensation" they purvey is a poisonous nostrum from which the public ought to be protected. If fortune-tellers should be exposed and punished for corrupting and demoralising the minds of servant girls, much more necessary is it that "mediums" should be prevented from debauching the intellectual sense of the masses by regaling the taste for novelty with the scaring pretence of dealings with the denizens of another world. This is an evil which must, at all costs, be "put down," and we are grateful to the Assistant-Judge of the Middlesex Sessions for his lucid exposition of the law in the case of Lawrence, and to the court for the justice dealt out to an impostor.

VIVISECTION.

THE International Association for the total suppression of vivisection, being discontented with what has been done by the present Government, is endeavouring to get up a strong public agitation on this subject again. We cannot reopen the subject, however. It has already received a large share of public attention, the deliberate consideration of a Royal Commission, and an extended discussion in both Houses of Parliament. We would suggest that the speakers at a recent public meeting would achieve far more good by directing their attention to the subject of cruel sports and other common practices of a painful nature, seeing that the amount of suffering to dumb animals in this way transcends altogether anything perpetrated under the name of science.

THE CARLISLE-PLACE ORPHANAGE.

IT is premature to express an opinion on the circumstances narrated in the public press with regard to the high mortality which has occurred at a Roman Catholic Orphanage in Carlisle-place. We have no inclination to emulate the example of a Board of Guardians, which, while allowing a legal representative of the institution to be present during a discussion of the case, refused him the right to reply. Nevertheless, it is manifest something more satisfactory than the official inquiry, just concluded, is necessary to reassure the public mind, and we suggest that the authorities of the orphanage should at once offer facilities for a full and scrutinising investigation.

RAIN AND DRAIN-WATER.

RICHMOND STATION has been in part under water. What makes this fact the more regrettable is the circumstance that the flood ceased to be one of rain-water, and became, in part at least, sewage. The site lies low, and the drainage is so constructed, as regards outfall and dip, that regurgitation in its worst form happens without obstacle. In short, the fluid washing the wheels of passing trains and giving off unpleasant emanations, by which travellers were disgusted, but railway officials continuously respired, at Richmond station, was at last a mixture of rain and drain-water. We shall presently be interested to know whether any cases of epidemic disease have occurred in the district, and how far the extraordinary condition of matters to which we have pointed may have been concerned in their causation.

VACCINATION AND DEATH CERTIFICATES.

MEDICAL practitioners are requested by the Registrar-General to append to their certificates of the cause of death in cases of small-pox a statement whether the deceased has been vaccinated. We trust, in complying with this demand, practitioners will not embody mere hearsay evidence in their returns. The only valid proof of vaccination is the presence of undoubted marks in the usual situation. In the absence of this evidence, we think practitioners will best protect the interests of statistical science by withholding any opinion.

THE Sanitary Committee of the City Guardians report that the district is in a favourable condition as regards the epidemic of small-pox. They have presented the following recommendations, consideration of which is adjourned for a week:—1st, that eight public stations be appointed for the purposes of revaccination only; 2nd, that the district medical officers be requested to make a house-to-house visitation; 3rd, that the Commissioners of Sewers be urged to provide an ambulance for non-pauper cases; 4th, that the old casual wards in Northumberland-alley be prepared for the reception of a few urgent cases, non-pauper also, if the expenses be paid; and 5th, that steps be taken to obtain a further supply of vaccine lymph, which was getting very scarce.

AT a meeting of the Society of Public Analysts, held on Wednesday, in the rooms of the Chemical Society, Burlington House, the annual report was read, from which it appeared that there was an increase of eleven members and associates, notwithstanding some resignations. Dr. Dupré was appointed president for the year, and afterwards read a paper on the "Detection of various colouring matters in wines," the author expressing a belief that fraudulently coloured wines did not often find their way into the English market. Mr. Cleaver subsequently read a paper on the "Admixture of oatmeal with barleymeal," and Dr. Muter brought the meeting to a close by reading a paper on the "Detection of salicylic acid in milk."

THE *British and Foreign Medico-Chirurgical Review* for January contains several very good papers. The first, on the Treatment of Phthisis, leads us up from the somewhat gloomy aspect of the insufficiency of medical aid to cure, to that of prevention—a direction in which we may hopefully look for great things. The second is on the Hygiene of the United States Army; and this is followed by review articles on the Physiology of the Uterine Mucous Membrane and Placenta, Cerebral Pathology and Epilepsy, Endemic Skin Diseases, the Pathology of Pneumonia, Recent Studies in Nerve Histology, with original contributions, and the usual Reports on Physiology and Histology, Medicine, Surgery, Toxicology, &c.

DR. DONNET, Inspector-General, R.N., who has been appointed one of the committee on the inquiry into the outbreak of scurvy in the late Polar Expedition, has had a good deal of Arctic experience, the officer in question having served for a period of nearly two years, embracing one winter in search of Sir John Franklin.

THE Manchester and Salford Sanitary Association have been presented by Mr. Aronsberg, optician, with a complete set of meteorological instruments. This gift will enable the Association to augment the information given in its weekly reports. At a late meeting of the Committee it was determined that an exhibition of sanitary appliances should be organised by the Association, to be open during the visit of the British Medical Association to Manchester next August, and for as long afterwards as may be found expedient. It is expected that the exhibition will be very complete and interesting, as showing the latest improvements in "structural sanitation."

WE understand that Surgeon-Major Oliver, of the 60th Rifles, has invented a new form of equipment, which promises, should the results of the practical trial to which it is about to be subjected ratify the correctness of the opinions formed in regard to it, to supersede that now in use. Surgeon-Major Oliver, who has the reputation of being an able and very enterprising officer, attended recently at the Horse Guards, and exhibited his equipment to His Royal Highness the Duke of Cambridge, in the presence of several officers of distinction, and we are glad to learn that the equipment is to be ordered for trial, and report as to its adaptation to the army.

Dr. GOLDIE, medical officer of health for Leeds, in his last monthly report, congratulates the sanitary authorities on the continued immunity of the town from small-pox. In the same report we find it stated that the traffic in unsound meat, which was at one time somewhat extensive, has been greatly restricted, and the difficulty in avoiding detection increasing every year. A first prosecution under the section of the Public Health Act, dealing with unwholesome milk, was lately carried to a successful issue in Leeds. The article, which had been supplied to a gaol for the use of the invalids, was proved to contain epithelial scales and pus-corpuscles.

CAN it be considered wonderful that poor aged people who, at the close of weary working lives, find themselves compelled to apply to the parochial authorities for relief, exhibit extreme reluctance to be sent to the workhouse? An old man, so paralysed that he was unable to turn in his bed with the celerity demanded by a "pauper nurse" at the Sheffield Workhouse, has been beaten severely with a strap, and had his head knocked against the wall. For this assault the nurse is to undergo *three weeks'* imprisonment—a less punishment than would have been inflicted for breaking a few squares of parochial glass, or destroying a yard of parish huckaback.

AT a meeting of the Richmond Select Vestry, held on Tuesday, the question of providing accommodation for cases of infectious disease was considered. The guardians were desirous of converting a portion of the workhouse into wards for the reception of non-pauper fever patients. This proposal the vestry declined to accede to, and it was resolved to memorialise the Local Government Board, calling their attention to the proposed action, and also to give notice to the guardians that if they passed the contemplated motion an injunction would be sought to restrain them from carrying it out.

UP to the last week the committee of the Dublin Hospital Sunday Fund had received £3769 5*s.* 3*d.*, and, as about £100 still remains uncollected, a total of £3869 represents the November collection of last year. Of this sum £3600 will be divided among fourteen hospitals in various proportions.

THE statue of Sir J. Y. Simpson, now standing complete in bronze in Mr. Brodie's studio, will be placed in the West Princes-street garden between Castle-street and St. John's Episcopal Church. The southern line of that noble street will then be a gallery of Scottish worthies in science and literature: Livingstone, Sir W. Scott, Christopher North, Allan Ramsay, and Simpson—all of them sprung from the middle or lower *bourgeoisie* except Sir Walter, who had some of the best Border blood in his veins.

AT the London Institution on Monday evening, Dr. B. W. Richardson, F.R.S., delivered the second of his two lectures on "Health Improvements in Great Cities." The lecturer, in lucid terms, described the desiderata to be aimed at in securing the maximum of health and comfort for house-dwellers, and urged his propositions with a force which appeared to convince as well as interest his audience. It may be anticipated that much general good will accrue from the delivery of these lectures.

H.R.H. the Prince of Wales accompanied by the Duke of Cambridge and other illustrious visitors, will be present at the delivery of the Hunterian Oration in the Royal College of Surgeons, and will afterwards dine with the president and other gentlemen in the library of the College. His Royal Highness has always displayed a keen interest in the affairs of the institution in Lincoln's-inn-fields, and we trust that his presence on the forthcoming occasion will tend to increase that interest.

LORD GRANVILLE presided at the annual meeting of the Dover Hospital last week, and strongly urged the claims of the institution for increased support, rendered necessary by the erection of a new wing. Mr. Freshfield, M.P., promised to contribute a sum of £100 to the funds, and his example, it may be hoped, will be useful in the work of obtaining fresh donations and subscriptions to a deserving charity.

THE Local Government Board has forwarded to the Metropolitan Asylums Board an official communication on the case of a servant girl sent to the Homerton Hospital, and mysteriously forgotten or overlooked. The communication has been referred to the medical officer concerned for rejoinder. Pending the appearance of his reply, we refrain from comment.

DEPUTY SURGEON-GENERAL IRVINE, M.D., has been appointed head of the Sanitary Branch of the Army Medical Department, in succession to Dr. Rutherford, C.B., who vacated the post many months back. Dr. Irvine served throughout the Indian Mutiny with much distinction.

DRS. ADAMSON and BELL, of St. Andrews, who deserved so well of that ancient cathedral city and its neighbourhood, are about to have their services commemorated by a memorial, which will take the appropriate form of a hospital.

DR. VON HEBRA, the illustrious professor of dermatology in the University of Vienna, has just received, in acknowledgment of his scientific and professorial services, the Order of the Iron Crown of the third class.

YELLOW FEVER has appeared on H.M.S. *Aboukir* at Port Royal. The ship is old, and is said to be in a bad sanitary condition. Too little care is taken by the Admiralty as to the state of receiving-ships on foreign stations.

M. CROCQ, Professor and Lecturer on Medicine in the University of Brussels, has been elected a member of the Belgian Senate by his fellow citizens of the Liberal party.

THE Military Medical Scientific Comity of St. Petersburg has ordered the translation of Dr. Pavy's work on Food into Russian, for the use, it is said, of the army surgeons of the country.

BY the latest accounts from Salford the epidemic of enteric fever, which recently broke out in the locality, is rapidly abating.

THE SMALL-POX EPIDEMIC.

AMONG the seven millions of persons estimated to be living in twenty of the largest English towns (including London), 128 deaths from small-pox were registered during the week ending 13th inst., against 104 and 146 in the two preceding weeks. These 128 deaths included 100 in London, 17 in Liverpool, 2 in Manchester, 7 in Salford, and 2 in Bradford. No fatal cases of small-pox were registered during the week in any of the other fifteen towns. Having regard to population, the fatality of the disease was greater both in Salford and in Liverpool than in London. Liverpool, Manchester, Salford, and London continue to be the only important centres of small-pox infection; this renders the responsibilities of their sanitary authorities all the greater to neglect no known precautions to stamp out the disease.

Within Registration London, the deaths from small-pox, which had been 97, 75, and 116 in the three preceding weeks, were 100 in the week ending 13th inst. Of these, 39 occurred in the Metropolitan Asylum Hospitals at Homerton, Stockwell, and Hampstead, 5 in the Highgate Small-pox Hospital, 4 in workhouse establishments at Kensington and Poplar, and the remaining 52 in private dwellings. The proportion of hospital cases to total cases was the same as in the previous week. After distributing the hospital cases, the Registrar-General reports that 13 of the deceased small-pox patients had resided in Hackney, 11 in Lambeth, 7 in Stepney, 7 in Poplar, and 6 in Wandsworth and Clapham. Central London, including the City and the registration districts of Holborn, St. Giles, and Strand, continues comparatively free from small-pox; whereas the annual death-rate from the disease was equal to nearly 1 per 1000 persons living in West and East London, and to 1·6 and 1·7 per 1000 respectively in North and South London.

In the outer ring of suburban districts, 11 deaths from small-pox were registered last week, against 3 and 8 in the two preceding weeks; 4 occurred in Croydon, 3 in West Ham, 2 in Enfield, and 1 each in Finchley and Isleworth. North, south, east, and west of London, therefore, fatal cases of small-pox during the week indicate the infection of the suburbs from the metropolis. Unfortunately the suburbs, including the now large town of Croydon, although under the sanitary organisation created by the Public Health Acts of 1872 and 1875, are, like London, unprovided with hospital accommodation for non-pauper cases of infectious disease, and are thus quite unprepared to prevent the further spread of the epidemic.

The amount of hospital accommodation at the disposal of the Metropolitan Asylums Board does not yet exceed 900 beds, of which 873 were occupied on Saturday (13th), a large additional number of cases having been necessarily refused admission during the week. There is a near prospect of an increase in the hospital accommodation provided by the Board, but the mischief to be feared from the failure to isolate several hundreds of cases occurring in the crowded and tenemented neighbourhoods of London is simply incalculable, and, what is worse, is now past remedy. One or two of the thirty-nine metropolitan sanitary authorities have met and "considered" the circular letter of the Local Government Board on the subject of their responsibility to provide hospital accommodation for non-pauper cases of infectious disease. The Hampstead vestry were urged, at a meeting on Saturday last, by a member and medical practitioner, to "set an example to the whole of London" by providing local accommodation, instead of sending patients to huge hospitals; and a committee of the vestry deputed the surveyor to select and report upon a suitable site for the erection of a temporary hospital for local cases. As there are at present no signs that the epidemic has reached its crisis, there may yet be time for the metropolitan sanitary authorities to erect and utilise such hospital accommodation, which, instead of being temporary, should be permanently available for emergencies.

The Registrar-General, in his last Weekly Return, makes another appeal to the profession to incorporate with all medical certificates relating to deaths from small-pox information relating to vaccination. It is reported that in 29 of the 52 fatal cases of small-pox registered during the week in private practice in London, no information on this point was given in the medical certificates. Precise and trustworthy information as to vaccination is especially important during a small-pox epidemic, as a means of accurately testing the actual extent of protection which may be expected from vaccination and revaccination. Those, too, who are well acquainted with the pernicious literature of anti-vaccinationists must be aware that the large proportion of fatal cases of small-pox "not stated" as to vaccination, are speciously used by them as an argument against vaccination, as they do not scruple boldly to assert, without one tittle of evidence to support their assertion, that all "not stated" cases are *vaccinated* cases. How untrue this assertion is can only be known by those of the profession who omit to give this information in their certificates, and by the Registrar-General, who specially investigates a small proportion of the "not stated" cases.

THE GENERAL MEDICAL COUNCIL.

THE following vacancies will occur during the present year, viz.:—

The Apothecaries' Society of London: representative, Edward Bradford, F.R.C.S. Eng.; elected for five years in December, 1872.

The University of Durham: representative, Thomas Thompson Pyle, M.D.; elected for five years in December, 1872.

The Universities of Glasgow and St. Andrews: representative, Professor Allen Thomson; elected for three years in December, 1874.

The University of London: representative, Dr. Storrar; elected for one year in October, 1876.

The Royal College of Surgeons of Ireland: representative, Rawdon Macnamara, F.R.C.S. Irel.; elected for one year in February, 1876.

The Queen's University in Ireland: representative, Sir Dominic Corrigan, Bart., M.D.; elected for one year in January, 1876.

The Apothecaries' Hall, Dublin: representative, Charles Henry Leet, M.D.; elected for one year in August, 1876.

The King and Queen's College of Physicians in Ireland: representative, Aquilla Smith, M.D.; elected for one year in October, 1876.

It may be noticed that the various licensing bodies differ as to the length of term of office of their representatives; but one of them, the King and Queen's College of Physicians in Ireland, has persistently from the commencement of the Medical Act, 1858, adhered to the period of one year. No Crown nominations lapse this year.

AT the last meeting of the Chelsea vestry, Dr. E. Crisp moved—"That, looking to the past and present history of small-pox epidemics in the metropolis, the disease has been much spread, and extended, in consequence of the inadequate provision made by the Government for the reception of persons, paupers or otherwise, affected with the disease, as well as from the absence of convalescent asylums for the seclusion of patients until the danger of contagion has passed; that this vestry is further of opinion that such permanent hospitals, on a large scale, in suitable localities, and with proper ambulances, should be provided by the Government, and that a petition be presented to Parliament by the vestry at the earliest opportunity, embodying these views, and praying for an alteration of the law." The motion was lost by 19 to 3 votes.

Correspondence.

"Audi alteram partem."

QUEEN CHARLOTTE'S LYING-IN HOSPITAL.

To the Editor of THE LANCET.

SIR,—I beg to forward you a return, furnished me from the records of Queen Charlotte's Lying-in Hospital, of the number of women delivered and of those who have died in the hospital, for twenty years ending December, 1876,—with no further comments, beyond that, in the number of deaths, those patients who were transferred to other (general) hospitals, where many of them died, are not included, and that since the early part of 1873, when a new system of management was supposed to be inaugurated, I have taken no part in the affairs of the hospital.

I am, Sir, yours, &c.,

Savile-row, Jan. 10th, 1877. CHARLES HAWKINS.

Number of Admissions and Death-rate for twenty years from the opening of the new Hospital in 1857 *to* 1876.

Year.	Patients.	Deaths.	Average per 1000.	
1857	245	3	12·24	
1858	341	3	8·80	
1859	320	27	84·37	
1860	256	18	70·31	Average death-rate 40·31
1861	369	20	54·20	
1862	351	17	48·43	
1863	386	6	15·54	
1864	384	13	33·87	
1865 (6 mths.)[1]	225	9	40·00	
1866	408	7	17·13	
1867	412	8	19·41	
1868	464	5	10·80	Average death-rate to March 1, 1873, 18·02
1869	414	7	16·90	
1870	484	6	12·40	
1871	452	7	15·50	
1872	433	12	27·71	
1873	416	15	36·06	Average death-rate from March 1, 1873, 30·05
1874	443	9	20·31	
1875	394	9	22·81	
1876	416	19	45·67	
	7613	220		

	Per 1000.
Total average death-rate for 20 years	28·89
Average death-rate for 9 years to 1865	40·31
Ditto from 1866 to March 1, 1873 (7 yrs. 2 mths.)	18·02
Ditto from March 1, 1873, to 1876 (3 yrs. 9 mths.)	30·05

OVARIOTOMY UNDER ANTISEPTIC INFLUENCE.

To the Editor of THE LANCET.

SIR,—I regret having overlooked Dr. Barnes's letter in your impression of January 6th. I had the good fortune to be present when he "carried out his ovariotomy with all antiseptic appliances at St. George's Hospital on the 3rd of April last."

On the 23rd of March last, I performed ovariotomy "with all antiseptic appliances" at the Chelsea Hospital for Women. Dr. Barnes was present, and rendered me valuable assistance. My case was complicated with rupture of one of the cysts previous to the operation, and with a rupture of the intestine to the extent of two inches, accidentally done while separating an extensive and long-standing adhesion of the bowel to the cyst. The rupture was closed by a continuous suture of catgut, knotted at each end, cut off short, and returned. This case, like Dr. Barnes's, "made an excellent recovery." Both cases were desperately unpromising; how far the "antiseptic influence" was contributory to such good results, it is impossible for anyone to say. My further observations, however, strongly incline me to regard the "antiseptic influence" most favourably in ovariotomies. As Dr. Barnes's "experience precedes Dr. Sims's by eight months," so mine precedes Dr. Barnes's by eleven days. Yet I, like him, "have no pretensions to priority over others;" my only desire being to place the facts on record.

I am, Sir, yours faithfully,

THOMAS CHAMBERS.

Chester-square, S.W., January 11th, 1877.

[1] Hospital enlarged.

DR. PAQUELIN'S NEW THERMO-CAUTÈRE.

To the Editor of THE LANCET.

SIR,—We beg leave to introduce to the notice of your readers a new and greatly improved mode of applying the actual cautery, by means of an ingenious arrangement depicted below.

The apparatus consists of a hollow handle, insulated with wood to protect the hands from the heat, and is furnished with movable platinum heads, corresponding in form to the cautery irons found generally useful; into these cauteries,

which are hollow, after they have been heated to blackness in the flame of a spirit-lamp, a blast of benzoline vapour is introduced by means of an ordinary spray bellows, which at once raises to and maintains them at a state of vivid incandescence. The heat thus produced can be kept up for an indefinite time by slightly compressing the bellows occasionally.

The apparatus is at once simple, handy, cleanly, and elegant, and is packed in a small, neat box containing spirit-lamp, benzoline flask, and cauteries. This apparatus, originally brought out in France, has been recently imported by ourselves.

We are, Sir, your obedient servants,

Bull-street, Birmingham. SALT & SON.

CHILDREN'S HOSPITAL, PENDLEBURY.

To the Editor of THE LANCET.

SIR,—My attention has been called to a letter headed "Children's Hospital, Pendlebury," in your issue of January 6th, and in reply I need only say, that the Board of Governors terminated their engagement with Dr. Rayne solely with the feeling that for the salary (£300 per annum) the charity was entitled to the services of a gentleman of more extended experience. This reason I gave to Dr. Rayne when I spoke to him at the request of the Board. The engagement was mutually made for a year, at the expiration of which, out of kindness to Dr. Rayne, it was pro-

posed to renew it for three months. The allegations about Dr. Burchardt, and inferred action of the Board upon any individual case or cases, are quite at variance with what occurred at the monthly meeting, and Dr. Rayne's subsequent application for an interview with the Board was unanimously refused on the ground that there was nothing to discuss.

I remain yours truly,

J. H. AGNEW,
Chairman of the Board of Governors.

Eccles, Manchester, January 17th, 1877.

ARMY MEDICAL SERVICE.

To the Editor of THE LANCET.

SIR,—I perceive that, ever watchful of the interests and honour of the medical officers of the public services, you have noticed the small share they have had in the decorations conferred on the occasion of the Empress of India's celebration at Delhi.

Comparatively speaking, they are not much to be pitied, and your sympathies are thrown away. Nearly twenty years ago a small but heroic army besieged, stormed, and captured Delhi, saved the "Empire" for England, and relieved every British heart in India.

Of the medical officers of that army not one received the decoration of any order, or any other recognition of merit or desert, as I know, having served throughout the siege.

I am, Sir, yours faithfully,

A SURGEON OF THE DELHI ARMY.

Junior United Service Club, Jan. 15th, 1877.

GLASGOW.

(From our own Correspondent.)

THERE was a special meeting of the Faculty last week to elect an examiner in Anatomy, in consequence of the certainly premature and, as many considered, ill-timed resignation of Dr. George Buchanan, who had been re-elected to the office a month previously. A very close and exciting contest was anticipated, and the Faculty Hall was crowded. The general practitioners of the city mustered in full force to support the candidature of Dr. Alex. Patterson, one of the surgeons to the Western Infirmary; but they were defeated by a majority of two, and Mr. Clark gained the day, and was appointed an examiner—until October next, at all events, when the term of office expires. To show that there was no rivalry between the two schools alluded to in my last letter, it may be mentioned that Mr. Clark was nominated by one of the Andersonian medical trustees, and rumour says that this is significant of an approaching coalition in mutual interests.

The Faculty recently voted £40 for a lecture or lectures during the ensuing year, and Dr. McKendrick, I understand, has been chosen by the Council. The ability of the lecturer is recognised by all, but the supporters of his opponent during the candidature for the Physiology chair say that the Faculty have by their first choice cast a somewhat unmerited slight on their ex-president, Dr. Watson, and that a year's delay would have been seemly as well as judicious.

The health of the city is unexampled. Few acute diseases have presented themselves at either hospital, and the labours of the pathologists have been wonderfully lessened. Students aver that had it not been for the visit of the Prince of Wales and the wet day, and the curiosity of sight-seers, even rheumatism would have been unknown, and opportunities for observing the benefits of salicin out of the question.

The hydrophobia scare is nearly over, and our canine friends walk the streets safely if protected with muzzles. Dr. George Macleod is thanked for calming undue fears, although his reasonings were grounded on data somewhat similar to those on which evil-doers deny the personality of the devil. That three men died of the disease, and that dread of water was the prominent symptom in all, cannot be gainsaid, even although they were not under the care of the Regius Professor of Surgery.

Under the cumulative influence of weighty statistical tables, and heavy selections from German literature, the *Glasgow Medical Journal* has long struggled, and, it is now whispered, has quietly expired. Two quarterly issues are not forthcoming, and subscribers ask what next.

On dit that Dr. James Morton will be the next President of the Faculty.

PARIS.

(From our own Correspondent.)

TYPHOID FEVER no longer prevails here in an epidemic form. The normal ratio of mortality from this cause has finally been reached, and other and more pressing matters now absorb public attention. Without, therefore, dwelling farther upon the clinical features of the disease as it has recently revealed itself in Paris, I will conclude the subject by a reference to the views which are held here in regard to the plan of treatment demanded for its cure or control.

The inherent antagonism of German and French ideas has been signally illustrated in this regard. The dogma promulgated by Brand as to the absolute certainty with which typhoid fever can be cured by means of cold baths, has, of course, been repudiated by all parties. There is also great unanimity of opinion in relation to the fallacy of the theory upon which this system is based, and no one pretends to believe that heat plays so important a part in developing the characteristic lesions of the disease, and in determining its fatality, as Liebermeister and his school so blatantly affirm. The facts favouring this coincidence of sentiment are embodied in the following statements:—

1st. The same parenchymatous degenerations are found connected with other diseases which are not necessarily marked by a high temperature, and which terminate after a brief course. In peritonitis, pyæmia, some forms of pneumonia, acute atrophy of the liver, cerebro-spinal meningitis, and, in fact, in most of those diseases which are characterised by decided constitutional symptoms, and run a peculiarly malignant course, identical degenerations are usually found. Besides, degeneration of the muscles and atrophy of the brain-substance are the exceptions and not the rule in typhoid fever.

2nd. Ulcerations of Peyer's glands are found in connexion with fatal cases of typhoid fever, as a general rule, whether they have been of long or of short duration, and without regard to the degree of heat which has been developed, or to the plan of treatment adopted.

3rd. The degree of heat developed and the virulence of the disease itself do not sustain a necessary and an invariable relation. It is known to every observant practitioner that some cases of this disease march to a fatal termination without any special development of pyrexia, and that many cases with a temperature of 104° do better than those with a temperature of 101°.

As regards the practical question of the utility of the Brand system, French practitioners are divided into three classes—viz., those who regard the method as inefficient, barbarous, and dangerous; those who esteem it of no special value as a therapeutical means, and, from the fear of developing complications, resort to it only under the most exceptional circumstances, if at all; and those who are its earnest advocates, and who rely upon it in every grave case of the disease. As there is an active controversy going on between the exponents of these various shades of opinion, I will endeavour to give you some idea of the merits of it.

Dr. Dujardin Beaumetz, speaking of the extreme unbelievers, declared at a recent meeting of the Société Médicale des Hôpitaux, that the most reliable statistics gathered during the prevalence of the recent epidemic, so far from establishing the greater value of cold baths as compared with other remedial agents, really prove that the mortality is somewhat increased by them. Thus, according to him, Dr. Maurice Raynaud lost eight patients out of fifty-four, and Dr. Féréol had a mortality of eighteen per cent., under the treatment of cold baths; while Dr. Desnos had

five deaths in fifty-four cases, Dr. Moissenet had seven deaths in fifty-five cases, and Dr. Gallard had three deaths in forty-eight cases, under the ordinary treatment. He likewise contended that the "Brand system" developed complications, such as syncope, pulmonary inflammation, and hæmorrhage, to an extent unparalleled in the records of other plans of treatment, and that the experiments of M. Berthomier proved conclusively that warm baths reduce the temperature, restrain the circulation, relieve thirst, restore the cutaneous function, and induce sleep just as surely as cold baths, and without their concomitant dangers. Dr. Moutard-Martin has also announced his uncompromising hostility to the employment of cold baths in the treatment of typhoid fever, alleging that serious complications usually result from them; that they neither shorten the duration nor abate the intensity of the disease, and that more satisfactory results can be obtained by a judicious course of purgation, combined with well-regulated affusions. Dr. Moissenet has taken nearly the same ground, and declared that he succeeded sufficiently well with cold affusions, followed by friction with a dry sponge, while his patients are subjected to no new hazard or additional discomfort. The champions of these ultra opinions have recently been greatly encouraged by certain statistics which have been gathered in Lyons. In consequence of a debate which occurred there, a number of questions relating to the origin, clinical history, and proper treatment of typhoid fever were addressed to all of the physicians of the place, and their answers to these interrogatories have just been carefully collected and compared. From these papers it appeared that 750 cases have been observed during a period extending from the middle of the year 1874 to the end of the year 1876; that of the cases so reported, 234 were subjected to the "Brand method," 158 were treated by cold affusions and therapeutical means of a similar nature, and 358 were managed by a resort to other plans than those into which cold water enters as an element; and that the mortality for the cases treated by cold baths was 9 per 100; for the cases treated by cold affusions, &c., 6 per 100; and for the cases treated by the "old methods," 5 per 100. At the same time, there was established at the Hôtel Dieu a special service designed to secure the most careful and rigorous application of the "Brand system," and of subjecting it to an *experimentum crucis*, as its adversaries contend. It is now reported that out of the fifty-two cases which were treated in this ward, nine terminated fatally—a result which certainly does not confirm the claim to infallibility for this method which its enthusiastic champion has put forward. The extremists also claim that their position is still farther strengthened by the fact that the post-mortem examination of those who had succumbed, notwithstanding the early and rigid employment of cold baths, revealed "extensive ulcerations of the glands of Peyer," thereby establishing the unreliability of the assumption that "under this plan of treatment the so-called characteristic lesion of typhoid fever is aborted." As this idea has never gained any foothold in this country, and has nothing to do with the efficacy of the treatment itself, there is surely no very decided advantage secured to the extremists by the revelations which the scalpel has made in this particular. I do not propose, however, to enter into this controversy, and I only give you the facts and figures just referred to for what they are worth.

The second phase of unbelief to which I have referred—the faith which illustrates itself in a timorous and casual resort to cold baths under exceptional circumstances, or in a refusal to condemn those who employ them more liberally—has many distinguished exponents. Among them Dr. Ernest Besnier stands most prominent, for he is recognised as a man of science and ability throughout France. His opinion in this connexion may be gathered from the subjoined extract from a letter recently addressed to me in regard to the general subject of the late epidemic:—"As regards treatment, nothing new or specially valuable has been discovered; the best results are realised by medicines which control the temperature, aided by lotions and by either warm or cold baths." Dr. Libermann, who also appreciates the fact that cold baths have a certain value in typhoid fever, is convinced that they develop serious complications in many instances, especially where there is a tendency to ulceration or irritation of the laryngeal mucous membrane. Whilst Dr. Gallard, at La Pitié, does not positively array himself against the "new system," his treatment varies according to the daily indications and *la méthode évacuante* is the means which he chiefly employs. Dr. Bourdon, at La Charité, to whom I would again express my great obligations for favours rendered me in my investigation of the epidemic, does not doubt the potency of cold baths in typhoid fever, but fears to employ them lest visceral congestions be produced. He says:—"Certain facts—pulmonary hæmorrhage and pulmonary inflammation—which have recently manifested themselves as results of the employment of cold baths, must serve to restrain the enthusiasm of their advocates, and hence, in grave cases, I prefer cold affusion, repeated several times during the day." It will thus be seen that there are many able and reliable men who occupy a middle ground in regard to this subject, and who, whilst not participating in the prejudices of such of their compatriots as totally reject the method of Brand, fail to see in it a new revelation in the science of therapeutics.

Doctor Maurice-Raynaud is, as I have before indicated, the recognised champion of this system of treatment in Paris, or, more correctly speaking, is the most prominent of those who employ cold baths in the treatment of typhoid fever. I make this distinction because this able physician does not by any means accept the theory upon which that method of treatment has been reared, or adopt the extravagant pretensions of many German and American practitioners in regard to its efficacy. In a word, he scouts the idea that pyrexia is the exclusive agent in the production of the parenchymatous alterations found in the tissues and organs of those who have died of this disease; that ulceration in the glands of Peyer is aborted by the early and persistent application of the system; and that the employment of baths before the seventh day necessarily eventuates in the recovery of every patient. What he does believe is simply: 1st, that cold baths properly employed do not increase the tendency to bronchitis, pneumonia, or hæmorrhage, and that these complications are really less grave when this method of treatment is instituted; 2nd, that although typhoid fever is not abridged in duration by the Brand system, it is rendered less severe and dangerous, because of the arrest of some of its most serious phenomena. It is unnecessary to repeat the arguments by which, in his admirable course at Lariboisière, he has sustained these opinions. Suffice it to say, that they, and the facts brought forward in connexion with them, have produced a profound impression here, and added greatly to the reputation of their author. As regards the statistics recently supplied from Lyons, he says, very justly, that the percentage of five deaths in the hundred cases attributed to what are known as the "old methods" of treatment—those in which cold water does not enter as a factor at all—was due to some happy chance, and that all other experience shows that a percentage of twenty deaths in the hundred cases is the real standard of comparison in this regard. He also contrasts the results just obtained at Lyons, under the application of this system, with the results previously secured there by Glénard, who claimed to have most triumphantly vindicated the superiority of this method of treatment. At the same time he brings forward as a witness Dr. Mazet, under whose superintendence the special service in the Hôtel Dieu was conducted, and proves by him that the most severely attacked were sent to his ward; that the percentage of mortality was really 16 to 100 in an epidemic of great virulence, and that the mortality in the hospital generally under the Brand system was 12·47 per 100 in the year of 1874, 18·05 per 100 for the year 1875, and 18·18 per 100 for nine months of the year 1876, although the gravest cases were alone subjected to it. With reference to his own experience, he says that, during the year 1873, he treated at Lariboisière 30 patients affected with typhoid fever by the "old method," and had a death-rate of 26·6 per 100, and that since then he has treated 117 cases of the disease, and has lost but 16 of the number, or, in other words, has had a mortality of only 14 per 100—an amelioration which is due to the fact that all of the most violent cases have been treated by the new plan of cold baths. In view of these facts, as well as of the more tractable character of the presenting complications and of the arrest of many dangerous symptoms in connexion with the employment of cold baths as a therapeutic agent, he unhesitatingly announces himself, under certain restrictions, an ardent advocate of the "Brand system," and declares that it gives results far superior to those of any other method of treatment, and

such as no conscientious physician has a right to ignore or to sneer at.

It is a notable circumstance that the employment of quinine as an antipyretic seems to have attracted but little attention here, and that inunction has no advocates whatever, although much reliable evidence in regard to their efficacy has been collected elsewhere. In private practice the monobromide of camphor has been used advantageously, and I am convinced that it will ultimately become a popular remedy. You know that M. Pathault succeeded in reducing the temperature of inferior animals 3° C. by the administration of this drug; and also that M. Bourneville has demonstrated not only its antipyretic action in connexion with the human system, but its sedative influence upon the circulation, respiration, and nervous system; and you will, therefore, at once perceive that it supplies important desiderata in the treatment of affections of this character. In doses of eight grains, repeated every two or three hours, it does not damage the stomach, and may be administered in many cases with decided advantage.

With this prolonged account of the epidemic which has recently prevailed in Paris, and of the phases of opinion in regard to the proper treatment of typhoid fever, I will conclude this letter and drop the subject.

Paris, Jan. 3rd, 1877.

Obituary.

SAMUEL PARKER, F.R.C.S. ENG.

WE regret to have to record the death of Mr. Samuel Parker, a well-known and highly respected surgeon, of Sheffield, who died lately at Bromgrove Cottage, of double pneumonia. The deceased gentleman, by the good deeds he had accomplished in and out of his calling, was regarded as a public benefactor in Sheffield, where his loss will long be mourned. Seldom has there been a man so free from pretence. Pure-minded, upright of purpose, and unassuming, he brought to his vocation a full sense of its responsibilities, and in the days when his professional success secured him an amount of work that was even oppressive, he continued to labour with uncomplaining zeal, buoyed up by the consciousness that his life was a useful one, and that there were things more worthy in it than personal ease. Felicitous in his marriage, he was cheered in his devotion to his arduous duties by one who sympathised with the professional enthusiasm which kept him at work at a period of life when he had well earned the *otium cum dignitate*, which should have crowned his labours. Mr. Parker was one of the honorary surgeons to the Sheffield Infirmary, having been appointed to that post eleven years ago, and before that he was for eighteen years surgeon to the Sheffield Public Hospital, the high reputation of which was largely due to his skill as a surgeon. His life was a bright example to younger members of our calling; and of his end, one who knew him writes, "He died a sincere Christian, and his works do follow him."

MR. ALFRED SMEE, F.R.S.

THE obituary columns of the daily journals recently contained this familiar name. Mr. Alfred Smee died at his residence in Finsbury-circus, aged fifty-eight, of diabetes. The deceased gentleman was for many years surgeon to the Bank of England. He had from an early age given much attention to the subject of metallurgy and electricity; as regards the former he published a good work, which was, however, superseded by more modern treatises, while his name was best known in connexion with the latter by the improved form of voltaic battery called "Smee's battery." He became a member of the Royal College of Surgeons in 1840, and was elected F.R.S. early in life. Mr. Smee was a very energetic, active-brained man, and he wrote a great deal on many subjects—for example, on the potato disease, biology and electro-biology, "The Principles of the Human Mind," and "My Garden." The latter work was beautifully illustrated and got up, and refers to his garden near Carshalton and the neighbourhood. He was connected, we believe, with the Gresham, the Accident Insurance (to both of which he was one of the medical officers), and other public companies. He contested Rochester twice unsuccessfully in the Conservative interest.

EDWARD WILLIAM MURPHY, M.D.

IT is with regret that we record the death of one who was for years well known in the obstetric world, Dr. Murphy William Edward Murphy graduated M.A. and M.D. in Dublin, settled there in practice, and became attached to the Dublin Lying-in Hospital as assistant obstetric physician. In 1841 the chair of Midwifery, University College, London, became vacant, and Dr. Murphy was appointed to fill it as successor to the late Dr. D. D. Davis. This appointment he held for twenty-three years, and resigned it in the year 1864. Dr. Murphy was the author of a treatise on Midwifery, of great value at the time of its publication, though now much behind the science and practice of the day. He also published two series of lectures and several papers on subjects connected with obstetrics. For several years his health has been failing, and he died on January 4th of this year, at his residence in Nottingham-place, at the age of seventy-four years.

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed the primary examination in Anatomy and Physiology at meetings of the Board of Examiners on Monday, Tuesday, and Wednesday last:—

D. A. Gomes, Bombay; W. Forrest, A. M. Easton, J. C. Baxter, S. M. C. Higgens, J. H. C. Maw, and J. Pointon, Liverpool; E. Godson, J. W. Riley, J. W. Moore, and T. W. Colbourn, Birmingham; J. C. Saunders, Sheffield; W. A. Norman, Cambridge; A. W. G. Gibbs, Bristol; H. C. Shaan and R. R. Morley, Leeds; P. M. Poett, Dublin; R. J. Dearden and S. Hampson, Manchester; J. Wishart, A. H. Wright, D. Fraser, and F. R. Eccles, Toronto and St. Thomas's Hospital; W. M'Geagh, Belfast and London Hospital; H. W. Senger, F. D. W. Wheaton, and L. C. N. Nicod, St. Mary's Hospital; G. H. Russell, Guy's Hospital; L. W. Stevens, J. Hartley, and F. Smith, Middlesex Hospital; R. D. R. Sweeting, London Hospital; H. H. C. Murray, Charing-cross Hospital; F. C. Gibbs, St. Thomas's Hospital; G. M'W. Henry and J. J. Lloyd, University College; J. Brunt and M. J. B. Anderson, St. Bartholomew's Hospital; G. N. Stathers, L. E. Williams, W. Saunders, Thos. Buxton, A. S. Norman, H. J. Barnes, A. L. Evans, and D. C. Embleton, University College; H. B. Mort, Ronald Ross, and W. A. Sykes, St. Bartholomew's Hospital; T. G. Clabburn, R. C. Stewart, J. W. Jervins, W. H. Addison, W. H. Norman, J. M. Martin, and T. F. Clarke, King's College; H. B. Curil, St. Mary's Hospital; J. P. Pearce, J. M. L. Davies, and C. J. Wills, Middlesex Hospital; G. A. Roper, Cambridge and St. Thomas's Hospital; George Pilkington, Howard Hawkins, and C. J. Fooks, Guy's Hospital; J. H. Henchey, St. Thomas's Hospital and Laval University; A. Fordham, London Hospital; Oswald Roberts and S. C. B. Robinson, St. Thomas's Hospital.

ROYAL COLLEGE OF PHYSICIANS IN IRELAND.—The following obtained the licences in Medicine and Midwifery at the January examinations:—

MEDICINE.—Eliza Louisa Walker Dunbar, Thomas Frederick Young, Christopher Gum, Edward Arthur Aldridge.

MIDWIFERY.—Edward Arthur Aldridge, William Blunden, Christopher Gunn, Jonas S. Poole, Francis Taylor Willis, Arthur Woods, Thomas Frederick Young.

DURING last year, a mandril was born in the Zoological Gardens, Dublin, being the first of its kind on record born in Europe.

A BRUNTON PRIZE or Bursary is being founded by subscription, at the University of Glasgow, as a memorial of the late Dr. Duncan M. Brunton, of Paisley.

A HOSPITAL for Diseases of the Throat and Ear has been established at Dublin, under the patronage of the Duke of Abercorn and other influential noblemen and gentlemen.

CATTLE PLAGUE having declared itself in Hamburg, from which port weekly exportations of animals take place to this country, and some cases having in consequence appeared in the Foreign Cattle Market at Deptford, an order was on Tuesday passed by the Lords of the Council, placing sheep and goats imported from Germany under the same restrictions as now apply to cattle. The effect of this order will be that all animals from Germany will be slaughtered at the place of landing. Special notices have been sent to all the local authorities throughout the country.

THE Board of Governors of Sir Patrick Dun's Hospital have placed twenty beds at the disposal of the guardians of the South Dublin Union, in the event of an outbreak of small-pox, upon terms to be arranged between the governors and the guardians.

THE LATE MR. JOHN WINZAR.—At the last meeting of the Salisbury Town Council, Dr. Alderman Lush, M.P., proposed the following resolution: "That this board desires to express regret at the loss it has sustained by the death of Mr. Winzar, who has lately been the medical officer of health, and who for many years has been intimately associated with the board in carrying out the sanitary improvement of the City." It was carried unanimously, and a copy of it ordered to be sent to Mrs. Winzar.

TESTIMONIAL.—Dr. J. H. Gray having resigned his appointment as house-surgeon to the Bristol Hospital for Women and Children, after a tenure of over three years, the honorary medical staff were anxious to give some substantial mark of their appreciation of the courteous and satisfactory manner in which he had discharged the duties of his office, and at a meeting held at the hospital on Friday, 12th inst. (Dr. Beddoe in the chair), presented him with a handsome timepiece, accompanied with a testimonial, signed by the physicians and surgeons, expressive of their feelings and good wishes for his future success in life. An inkstand was also presented by the nurses, and various gifts by other officers and patients of the institution, as tokens of their respect and esteem.

Medical Appointments.

ALEXANDER, J., M.B., has been appointed Superintendent of the Western Infirmary, Glasgow, vice Lilley, resigned.

BENNETT, F. C., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 5 District of the Alderbury Union, vice Winzar, deceased.

BLAKER, N. P., M.R.C.S.E., L.S.A.L., has been appointed a Surgeon to the Sussex County Hospital, Brighton, vice Furner, resigned.

BRIGHT, J. A., M.R.C.S.E., L.S.A., has been appointed Certifying Factory Surgeon for Street, Somerset, vice Nile, resigned.

COATES, F. W., M.D., has been appointed Medical Officer of Health for the Salisbury Urban Sanitary District, vice Winzar, deceased.

CROLY, H. G., F.R.C.S.I., L.K.Q.C.P.I., has been appointed Consulting Surgeon to the Rathdown Hospital, Monkstown.

DIXON, G., M.D., M.R.C.S.E., has been appointed Parish Medical Officer and Public Vaccinator for the Thames Ditton District of the Kingston Union; also Surgeon to the Foresters and Odd Fellows.

EASTALL, H. F., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for No. 6 District of the Liskeard Union.

FOX, Dr. C., has been reappointed Medical Officer of Health for the Central, Eastern, and Southern Divisions of the County of Essex.

GIBBINGS, A., M.R.C.S., L.D.S., has been appointed an Assistant-Surgeon to the Dental Hospital of London.

HUME, G. H., M.D., has been reappointed an Assistant-Surgeon to the Newcastle-on-Tyne Infirmary.

HUTCHINSON, S. J., M.R.C.S., L.D.S., has been appointed an Assistant-Surgeon to the Dental Hospital of London.

JONES, A. H., M.R.C.S.E., has been appointed House Surgeon to the General Infirmary, Northampton, vice Smith, resigned.

KIDD, A. N., M.D., L.K.Q.C.P.I., F.R.C.S.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Ballymegran Dispensary District of the Dungannon Union, and the Caledon Dispensary District of the Armagh Union, vice Simpson, resigned.

KIDD, H., L.R.C.S.I., L.K.Q.C.P.I. & L.M., L.A.H.D., has been appointed Medical Attendant to the Royal Irish Constabulary, Tullow, vice Hart, resigned.

MCAVEE, W., M.D., M.Ch., L.M., has been appointed Resident Medical Officer to the Parish Infirmary, Liverpool, vice Floyd, resigned.

O'CARROLL, M., L.M. & L.S., L.M.K.Q.C.P.I., has been appointed Medical Officer, Public Vaccinator, &c., for the Clane and Timahoe Dispensary District of the Naas Union, co. Kildare, vice Hogan, resigned.

PAGE, F., M.D., has been appointed an Assistant-Surgeon to the Newcastle-on-Tyne Infirmary.

ROBINSON, G. W., L.R.C.P.L., M.R.C.S.E., has been appointed Resident House Surgeon to the Royal Albert Edward Infirmary and Dispensary, Wigan, vice Fairbank, whose appointment will expire at the end of March.

SANKEY, H. R. O., M.R.C.S.E., has been appointed Resident Medical Officer and Registrar to the National Hospital for the Paralysed and Epileptic, vice Sturge, resigned.

STEELE, S. T., L.R.C.P.Ed. & L.M., M.R.C.S.E., has been appointed Medical Officer and Public Vaccinator for the Morley District of the Dewsbury Union, vice Ellis, resigned.

STOCKWELL, J., M.B., C.M., has been appointed Medical Officer and Public Vaccinator for the Parish of Middlebie by Ecclefechan, vice Parker, resigned.

TAYLOR, H., M.D., has been appointed Medical Officer and Public Vaccinator for the Kingsclere District and the Workhouse of the Kingsclere Union, and Medical Officer of Health for the Kingsclere Sub-district of the Kingsclere Rural Sanitary District, vice Richards, resigned.

TENNENT, W. A., L.R.C.P., has been appointed Medical Officer of Health for the Holme Cultram District.

WILLCOCKS, I., M.R.C.S.E., L.S.A.L., has been appointed Medical Officer for the Overton District of the Whitchurch Union, Hants, vice Hemsted, resigned.

Births, Marriages, and Deaths.

BIRTHS.

GRAVES.—On the 11th inst., at Chichester-road, Westbourne-square, the wife of F. G. Graves, M.D., of a daughter.

KEELAN.—On the 16th ult., at Roseau, Dominica, the wife of N. W. Keelan, L.R.C.P.Ed., of a son.

KIRK.—On the 11th inst., at Newton Cottage, Partick, Glasgow, the wife of Robert Kirk, M.D., of a son.

MAY.—On the 12th inst., at Tottenham, the wife of Edward Hooper May, M.D., F.R.C.S.E., of a son.

ROCHE.—On the 11th inst., at Ipswich, the wife of William Roche, L.K.Q.C.P.I., of a son.

ROWORTH.—On the 7th inst., at Grays, Essex, the wife of Alfred T. Roworth, M.R.C.S.E., of a son.

MARRIAGES.

DRAKIN—MARTYR.—On the 16th inst., at St. Peter's, Regent's-park, by the Rev. R. H. A. Bradley, M.A., Vicar, Surgeon C. W. Shirley Deakin, F.R.C.S.I., S.Sc. Cert. Camb., H.M. Bengal Army, to Maria, eldest daughter of Joseph Martyr, of Woking, Surrey. No cards.

DUNN—FALLOWS.—On the 11th inst., at Christ Church, Wolverhampton, by the Rev. C. H. V. Pixell, assisted by the Rev. G. Bodington, Frederick Dunn, Surgeon, of Wolverhampton, to Mary Jeule, daughter of the late Richard Fallows, of the Fire Hall, Stone.

GELL—STIFF.—On the 11th inst., at Bishops Itchington, by the Rev. Blain Mandale, M.A., assisted by the Rev. John Hackett, M.A., Alfred Scott Gell, M.R.C.S.E., of Southam, Warwickshire, to Mary Susannah, only daughter of Mr. John Stiff, of Harburg, Warwickshire.

GODSON—TRITTON.—On the 11th inst., at St. George's, Hanover-square, by the Rev. Canon Lindsay, Rector of Kettering, assisted by the Rev. J. W. Bliss, Rector of Bettesbanger, and the Rev. John Wreford, Clement Godson, M.D., M.R.C.P.L., of Upper Brook-street, Grosvenor-square, to Alice Maria, daughter of the Rev. R. Biscoe Tritton, Vicar of Otford, Kent.

SAWTELL—BARNETT.—On the 12th ult., at Hornsey Church, by the Rev. J. Dyer Tovey, M.A., Tom Henry Sawtell, M.R.C.S., L.R.C.P., of Adelaide, Surgeon-Superintendent of the S.A. Government Emigrant-ship *British Enterprise*, to Edythe Alice, daughter of James Driver Barnett, Esq., of Crouch End, Hornsey.

DEATHS.

ALLEN.—On the 4th ult., at Rawal Pindee, India, Robert Austen Allen, M.D., Surgeon-Major, Army, aged 46.

BELLYSE.—On the 11th inst., at Audlem, Cheshire, Richard Baker Bellyse, M.R.C.S.E., aged 67.

BUTTER.—On the 13th inst., at Plymouth, John Butter, M.D., aged 85.

CAWLEY.—On the 4th inst., at Brailes, Warwickshire, John Cawley, L.S.A.L., aged 81.

CLARKE.—On the 2nd inst., at Barwickstead, Cumberland, William Barwick Clarke, M.R.C.S.E., aged 65.

HULME.—On the 28th Nov., at Dunedin, Otago, New Zealand, Edward Hulme, M.D.

LAWRIE.—On the 1st inst., at Bradford, Yorkshire, John Douglas Lawrie, M.R.C.S.E., aged 34.

LELAND.—On the 30th ult., at Brough, John Smallman Leland, L.R.C.P.Ed., of Kirby-Stephen.

MARTIN.—On the 12th inst., at Grafton-street, Dublin, Dominick Martin, M.R.C.S.E., aged 71.

MEARES.—On the 15th inst., at Pembroke-road, Dublin, John Henry Gouldsbury Devenish Meares, L.K.Q.C.P.I., Surgeon-Major 82nd Regiment, aged 41.

MEE.—On the 21st ult., at Dorking, James Mee, L.R.C.S.I., Deputy Surgeon-General, Army, on half-pay, aged 58.

MERCER.—On the 1st inst., at the East Riding of Yorkshire Lunatic Asylum, Beverley, Niel Gray Mercer, M.D., Resident Medical Superintendent.

PARKER.—On the 30th Nov., at his residence, Bromsgrove Cottage, Sheffield, deeply and deservedly regretted by all classes, Samuel Parker, F.R.C.S.E., aged 57.

SHARP.—On the 4th inst., at Cullen, Hugh Sharp, M.R.C.S.E., aged 66.

SILLAR.—On the 3rd inst., at Bath House, Sydenham, Zechariah Sillar, M.D. aged 81.

SMEE.—On the 11th inst., at Finsbury-circus, Alfred Smee, F.R.C.S.E., aged 58.

SNEWIN.—On the 5th inst., Alfred George Snewin, M.R.C.S.E., of York-place, Portman-square.

SPENCE.—On the 4th inst., at Edinburgh, Basil Spence, Surgeon, aged 76.

TOMLINSON.—On the 7th inst., at Burton-on-Trent, Robert Sherratt Tomlinson, M.R.C.S.E., aged 70.

TYLER.—On the 15th inst., at East Ilsley, Berks, E. A. Tyler, M.R.C.S.E., aged 46.

WIDDUP.—On the 14th ult., on board the steamship *Para*, William Cæsar Sutton Widdup, L.K.Q.C.P.I.

WILLIAMS.—On the 11th inst., at Brighton, Nicholas Williams, Surgeon, aged 89.

[N.B.—*A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*]

BOOKS ETC. RECEIVED.

Dr. M. Foster: Text-book of Physiology.
The Year-book of Facts for 1877.
The Annual Summary. 1877.
The Journal of Nervous Mental Diseases.
Dr. Campbell Black on Bright's Disease.
Mr. T. Brassey on British Seamen.
Ophthalmic Hospital Reports. January.
Westminster Review. January.

METEOROLOGICAL READINGS

(Taken daily at 8 a.m. by Steward's Instruments.)

THE LANCET OFFICE, JAN. 18TH, 1877.

Date.	Barometer reduced to Sea Level, and 32° F.	Direction of Wind.	Wet Bulb.	Dry Bulb	Solar Radia. in Vacuo	Max. Temp. Shade	Min. Temp. in past 24 hrs.	Rain-fall in past 24 hrs.	Remarks at 8 A.M.
Jan. 12	29·82	W.	33	34	...	39	32	0·21	Raining
„ 13	30·08	S.E.	37	38	...	42	33	...	Foggy
„ 14	29·80	S.W.	44	46	...	50	37	0·12	Foggy
„ 15	30·01	W.	37	38	...	48	37	0·23	Raining
„ 16	30·11	W.	47	48	...	52	37	...	Cloudy
„ 17	29·80	S.W.	50	52	...	52	47	0·03	Overcast
„ 18	29·87	S.W.	44	45	...	50	41	0·04	Overcast

Notes, Short Comments, and Answers to Correspondents.

HOSPITALS IN BUCHAREST.

A CORRESPONDENT has obligingly furnished us with some notes on the hospitals of Bucharest, from which we make a short abstract. At a time when so much attention is directed to the East, our readers may be interested in the information given. Our correspondent visited five of the chief hospitals of the city, which contain a total of nearly 1000 beds; while there are, in addition, a maternity hospital, a lunatic asylum, and a hospital for incurables. There is a medical school, numbering about 200 students, which is now in a somewhat disorganised condition, owing to the military preparations. The medical wards of the chief hospital are very fairly lighted, spacious, and clean, and have an appearance of comfort. The surgical wards, on the contrary, are said to be neither cleanly nor well lighted and ventilated. At the military hospital, containing 200 beds, an opportunity was given of seeing part of the Roumanian ambulances, which have been organised under the superintendence of M. D'Avila. The ambulance waggons are constructed on a plan which combines some of the best points of the Austrian, German, and French models. Each army surgeon is provided with a case of amputating instruments, together with a valise, containing all the necessaries for field work, and also a large satchel, full of extra lint, bandages, &c., both of which are carried by a soldier of the sanitary corps. A new hospital is described as a handsome structure, equal to some of the best buildings of a similar nature in England. At the children's hospital fully half the cases treated are intermittent fever, spleen enlargement being common. The disorder is treated generally with salicin, sometimes with quinine, large quantities of the latter drug being consumed in the form of the bromo-hydrate. At all the hospitals out-patients are seen three times a week. A large number of cases are admitted as in-patients which would scarcely be taken into a London hospital—e.g., simple fractures of the arm and clavicle, ulcers of the leg, slight bronchitis, &c.

J. H. W., (Farringdon.)—The works will be noticed in due course.

MEDICAL ATTENDANCE ON SCHOOLS.

To the Editor of THE LANCET.

SIR,—In reply to your correspondent, "T. C.," in your last issue, on the above subject, I will give him my experience.

I was resident medical officer at a large public school in the north of England for five years. I had to attend masters, boys, and servants, in all numbering about 500. The salary was £300 per year for the first two years, subsequently £250. I was also allowed private practice; but that was not much, perh ps £80 to £100 a year, in addition to the salary. I was provided with most comfortable rooms, washing, fire, and attendance. All the masters and myself took our meals together in the common room.

Each boy was charged £1 1s. per year for medical attendance; and as there were 400 boys, I am inclined to think the management made something out of it, notwithstanding they paid me, the nurse, and servant, and also the drug bill, but the latter was rarely more than from £7 to £10 a year.

The number of cases of serious illness is, as a rule, very small; but, when they do occur, are most harassing, on account of correspondence with parents and consultations with the consulting physician (who, by the way, got £5 5s. every time he came) and family doctor. Space will not permit me to enter into details as to the number of cases &c.

In conclusion, I may say I considered my salary very liberal, considering the small amount of work I had. I would only recommend a very young man to apply for such an appointment, one who wants time to read for an examination for instance. Another advantage of school appointments is this: from ten to twelve weeks' holiday every year. This latter I considered a great boon, as I was able to visit my old hospital, and keep up my knowledge and acquaintances.

Yours truly,

Jan. 15th, 1877. LATE MEDICAL OFFICER TO A PUBLIC SCHOOL.

Junius.—There is an objection to using the title, simply because it conveys a false impression. It is tantalising to see others doing wrong, and apparently benefiting by it; but our correspondent must remember that he has the satisfaction of doing right. The letters "M.R." after a name are a very respectable appendage, pending the right to use the prefix in question.

Mr. W. S. Newby.—We never recommend a particular physician.

OLIVER GOLDSMITH AND JAMES'S POWDER.

In an early edition of the "Poems and Plays" by Oliver Goldsmith, M.B., published in 1777, we have encountered a curiosity which has been pasted into the volume by some previous possessor. It is an extract from the *Public Advertiser* of 1774, and to the following effect:—

"*For the Public Advertiser.*

"Mr. Hawes desires the following declaration may be inserted in the *Public Advertiser*:—I declare that Dr. Goldsmith refused having any medicines administered to him whatever, excepting Dr. James's powder, upon which I returned to my master's house, and carried one paper, which I took from the packet, divided into 4 parts, that it might be administered in proper doses; and I further declare that it was the genuine fever powder bought at the shop of Francis Newbery, and in St. Paul's churchyard.

"May 1, 1774. EDMUND DEARNS, Journeyman to Mr. Hawes.

"The above declaration I am ready to certify upon oath if required.

"Edmund Dearns called me about 12 o'clock on Friday night, the 25th of March, to hold the candle. I saw him take out something wrapped up in marble paper, and a large broad seal to it. I asked him what that was? He broke the seal, and at the same time said it was James's powder. This I do declare to be true, and am ready to certify upon oath if required.

"May 1, 1774. MARY PRATT, Servant to Mrs. Hawes.

"In justice to my friend's truth, I think it proper to contradict Mrs. Smith in one of her assertions in Newbery's paragraph. On the 9th of April I called on Mr. Hawes to go with me to spend the evening in the Strand. He told me he must wait a few minutes, as he had ordered Dr. Goldsmith's nurse to call to be paid. She went into his parlor behind the shop, and I believe was there about five minutes. In going out through the shop, Mr. Hawes says to the nurse, 'Nurse, for God's sake, whenever you are sent for again to people that are ill, always desire them not to take James's powder without the consent or advice of some physical man.' She made answer and said, 'Sir, I will,' and said not another word, but 'I wish you good night,' and went away. If required I will testify the above on oath.

"Fleet-street, No. 73, May 1, 1774. W. TOWNSEND."

In the Life of Goldsmith attached to this edition of his "Poems and Plays," we also learn that his death was brought about by a fever induced by "strangury," and which we are informed was "improperly treated." The extract from the *Advertiser* shows that an attempt was made to attribute his death to the James's powder which was administered. This must have been a severe shock to the popularity of this nostrum—a shock, however, from which it completely recovered.

Bolo the Duke.—Apply to the Secretary of the College.

ANIMAL VACCINATION.

To the Editor of THE LANCET.

SIR,—Now that small-pox is raging, and as the epidemic threatens to be severe, may it not be as well to consider the advantages of animal vaccination, and whether or not it is fit that the Government should adopt it, and so offer to those whom they compel to be vaccinated the choice of either animal or human vaccine?—(or if the Government insists on vaccination, they are certainly under the moral obligation to provide lymph above suspicion. All medical men of experience admit the necessity not only of vaccination, but of revaccination, and the great desire of the Government should be to convince the public, not only that efficient vaccination will protect them from this terrible scourge, but that by vaccination they shall not be exposed to the risk of worse diseases than that it is intended to prevent. The possibility of disease being conveyed by vaccination cannot now be denied, though the cases on record are happily few. While on this point, though with all due respect to so great an authority as Dr. Seaton, I would beg to draw attention to what I think must now be admitted as an error in his book on Vaccination, where he states in the paragraph on the performance of vaccination, "If by accident any blood be drawn in puncturing the vesicle, this must be allowed to coagulate, and then be carefully removed before taking the lymph." This was stated to have been done in the cases of vaccino-syphilis reported by Mr. Hutchinson, with what appalling effects is well known. I think it should be a cardinal rule that whenever blood shows on puncturing the vesicle, no lymph should be taken from it. Animal vaccination has failed, when undertaken privately, from want of money and support; but if a poor country like Belgium is able to practise it with satisfaction to both the profession and the public, why should the British Government, the only nation which enforces vaccination, be behindhand in giving to its subjects the choice of lymph without the possibility of syphilis? Here I think we find one great cause for small-pox: the disease is among us, and many are afriad to be revaccinated. Hospitals are built at a great expense to the public for treating the disease; but the old proverb, "Prevention (by vaccination) is better than cure," is not carried out. Lymph after a time does not always produce such perfect vesicles, and it is proved that when passed through a weak or cachectic system gives a less vigorous produce, which in time will finish by losing all its power. The moral is, Don't use it. But how are private practitioners to keep up their supply? Few have sufficient really fit children to vaccinate from; they know by the history that from 10 to 20 per cent. of the fathers have had syphilis, and they ought not to pass the vaccine on. Consequently, when a really good child takes well, the temptation is to empty all the vesicles. I will here quote from the words of Dr. Warlomont: "Are mothers wrong who refuse to have the vaccinal pustules of their children emptied, thinking that they will be better preserved against small-pox?" If not, this is a serious question, and deserves to be thoroughly examined. Further on he states that more than 10,000 children were vaccinated in Brussels from the calf in 1865 to 1870, during the great epidemic, and not one failed with small-pox. The success of calf lymph, if used fresh, is fully equal to human, 96 per cent. being the result of primary vaccinations, and 63 per cent. of revaccinations. At the present moment vaccine is at a premium, owing to the great demand; but if animal vaccination was carried out, which is easily capable of endless multiplication, there might be an unlimited supply of recent lymph, from which those who prefer human lymph could renew their stock.

Yours truly,

Clapham-common, Jan. 11th, 1877. BENJAMIN DUKE.

A PIECE OF GLASS SWALLOWED.

Mr. W. R. Erson, assistant to Thos. Johnston, M.R.C.S., Belper, in a communication, informs us of a case where a man, while drinking beer from a jug in a friend's house, swallowed a piece of glass, triangular in shape, and about three-quarters of an inch in length from the apex to the base. He experienced nothing further from it until the third day, when he complained of severe pain in the region of the rectum, accompanied by an inability to have a stool. On Mr. Erson being sent for hurriedly on the morning of the fourth day, and on examination per rectum, a foreign body was detected, which was fixed transversely in the mucous membrane, about an inch from the anus. After some trouble it was removed by aid of the scalpel and forceps, and proved to be a piece of glass, as above described. The patient's account of the circumstances is as follows: While drinking in a friend's house, the chimney of the lamp on the table burst, scattering the glass, and he suspects that the piece in question must have fallen into the jug, and that he swallowed it unconsciously during a plentiful libation. The case is worthy of note, considering the nature of the obstruction, and the escape of any injury to the intestines during its perilous passage.

An Enquirer.—1. The Medical Council, as at present constituted, consists of representatives of nineteen licensing bodies (Corporations and Universities included), and six Crown nominees.—2. The profession at large up to the present period is consequently not represented on the Council.

RUBBER TRACHEOTOMY TUBES.

To the Editor of THE LANCET.

SIR,—Having had a little experience in the use of vulcanised rubber and the precious metals for making artificial dentures, I should like to make a suggestion or two on the construction of tracheotomy tubes; for seeing the number of serious accidents which have lately happened through the breaking of these important instruments, it is necessary something should be done to render their long-continued use free from the risk which now attends it.

Experience proves that the best soft vulcanised rubber, after a few years' exposure to the atmosphere, becomes inextensile and even brittle; this, in proportion to its thinness and extent of exposed surface. Contact with animal fluids aids the change, and, of course, if free sulphur or such matter as red ochre is present, disintegration is still more rapid.

A patient, who had been wearing a soft red rubber tube for three weeks, came to the surgery at Guy's Hospital on Christmas-day with the flange all but detached, and while untying the tape which held it in his neck, it completely separated, leaving the greater portion of the tube in the trachea. Fortunately it was extracted without much difficulty. The rubber was found to be in a rotten, crumbling state.

The soft rubber tube has the great advantage over silver and hard rubber if it is necessary an instrument should be worn for long, in that it adapts itself to the movements of the parts, and is less apt to cause ulceration. I would suggest that it should be made of two layers of rubber, containing between them some coarse textile fabric, through the meshes of which the layers could unite. This, while leaving the tube flexible and soft, would greatly add to its strength.

Mr. Howse speaks of the hard vulcanite tubes being brittle. This is either owing to the material of which they are made being impure, or having been vulcanised at too high a temperature. The hard vulcanite used by dentists is wonderfully durable, as is shown by patients wearing palates made of it for ten or fifteen years without any perceptible change having taken place, though in constant contact with the acids &c. of the mouth and food. This rubber is superior in quality to that used for ordinary manufacturing purposes. The tubes might with advantage be made of it. The vulcanite might be used only as a protective or enamel to a metal tube. One made of German silver, and completely covered by a thin layer of hard rubber, would combine to an inexpensive form the strength of the metal tube and the resistance of hard vulcanite to corrosive influences. It would be a great advantage to have these rubber-covered tubes made on Mr. Bryant's principle, with a ball and socket, and could easily be done.

Accidents are most common with the ordinary silver tubes. On examining some which have been in wear for a long time, one finds them corroded, thinned, and fragile. The most frequent place for them to give way is at the joint, where the tube is soldered to the collar. Dentists have long abandoned the use of silver in the mouth; for it is found to turn black, corrode, and soon wears in holes. If the tracheotomy tubes were made of an alloy of three parts of silver to one of platinum they would be practically indestructible; for in the mouth, where the test would be more severe than in the trachea, this alloy lasts for years, whereas a silver plate wears out in a comparatively short time. The silver tubes give way at the joint, simply because the solder is composed of silver and brass, and is even more easily acted on than the rest of the instrument. To solder the above alloy, 16 carat gold should be used, so that this part would be perfectly safe.

Hoping these suggestions may be of use,

I remain, Sir, yours faithfully,

THOS. F. FEDERY, M.R.C.S., &c., Dentist.

High-street, Borough, Jan. 11th, 1877.

To the Editor of THE LANCET.

SIR,—Having heard of a flexible tracheotomy tube having parted from its shield and passing down the patient's throat, I beg to state, as the first manufacturer of these instruments, that this tube, although used in Guy's Hospital, was neither made nor supplied by me, and that such an accident is rendered impossible from the construction of these tubes made by me, as this was one of the first defects found in the sample ones. Fearing that, should it become known that such an accident had happened, it might deter the profession from giving the tube a fair trial, I hasten to inform the profession that such accidents are preventable, and ought on no account to occur.

Yours &c.,

St. Thomas's-street, Borough, Jan. 8th, 1877. J. MILLIKEN.

Two Hands.—The paper in question is now the property of the Society, and it will (subject to the approval of the referees) be printed in the next volume of the Society's Transactions.

ABSCESS OF THE PERICARDIUM, IN A COW, CAUSED BY A HAIRPIN.

AT a late meeting of the Montreal Veterinary Medical Association, the President, Professor McEachran, exhibited a curious specimen of abscess of the pericardium in a cow, caused by the half of a common hairpin. The pericardium was thickened to fully half an inch, was adherent to the lower third of the left ventricle, the remainder forming the walls of a large abscess, lined by a thick pyogenic membrane, and had contained more than two quarts of fluid mixed with pus, part of which was semi-caseous and fetid. The hairpin was found partly lodged in a faculous recess in the pericardium, near the middle of the left side of the heart, and jutting into the abscess.

Mr. A. Reid.—We cannot recommend anyone.

SALICIN, SALICYLATE OF SODA, AND SALICYLIC ACID.

To the Editor of THE LANCET.

SIR,—In your issue of the 13th January there is an interesting letter from Mr. Sircar, Calcutta, pointing out the nauseating effects of salicin. In this I can corroborate him, having felt considerably sick after taking as small a dose as ten grains of salicin. On the other hand, I have taken as much as two scruples of salicylic acid at a dose without feeling the slightest gastric disturbance, and no bad symptoms but the specific catarrhal action on the throat and constipation. The smell of salicylic acid could be detected in the breath for some days afterwards.

I would now recommend a formula for using salicylic acid, which has been very successful in several cases of acute rheumatism under my care. It is as follows:—Salicylic acid, bicarbonate of potash, of each three drachms; water to six ounces: a tablespoonful to be taken every two hours. I have never found this hurt the throat in any case in which I have used it. It requires to be used at once after being prepared, as it speedily becomes putrid if left exposed to the air. It is, of course, a solution of salicylate of potash, and must be prepared in an open vessel, as great effervescence takes place in preparing it. One curious effect which it possesses is, that, although it cannot keep its own solution antiseptic, it is when introduced into the system a most powerful antiseptic, giving to the urine a power of remaining free from putrefaction for several days. In one experiment which I tried, urine passed three hours after taking one ounce of the solution of this substance, containing fifteen grains of salicylic acid and an equal quantity of bicarbonate of soda, kept fresh and free from putrefaction for ten days. The explanation by Binz of the action of antiseptically inert substances as salicylate of soda or potash in lowering temperature seems to be the most rational. His theory is, that when they have reached the tissues in the body, the carbolic acid evolved in the tissues changes, days hold of the base, obliterates the acid of the compound administered, and the antiseptic influence of these is thus exerted in the tissues of the body.

In conclusion, I think we may fairly say that in salicin, salicylate of soda, or pota-h and salicylic acid, we have a set of specifics for cases of acute rheumatism where the temperature does not exceed 103°; but cases where the thermometer indicates a higher figure are apt to end fatally in spite of all remedies. I am of opinion that the formula which I have mentioned is the best that can be used, as it has no tendency to cause disturbance of any organ in the body, and its antipyretic effects are so very well marked.

I am, Sir, yours truly,

J. A. EUSELINE STUART, L.R.C.S. Edin.

Musselburgh, N.B., Jan. 13th, 1877.

To the Editor of THE LANCET.

SIR,—Will you let me add my meed of praise to what I consider the extraordinary effect of salicin in a case of acute rheumatism.

I saw a constable for the first time on Jan. 10th, he having been already under treatment for eleven days, with the usual symptoms, including great pain in the region of the heart. He was quite unconscious, pale as death, with cold moisture over hands and feet, laboured heart, pulse 60, second beat scarcely perceptible. At the time I thought him a dying man, but was induced to give the salicin a fair trial. I commenced with ten-grain doses every two hours, and one ounce of brandy between each dose. After twelve hours I found him in a quiet sleep, pulse 60, but not so laboured, and second beat much improved. Continued treatment for next twenty-four hours, when I found him quite conscious, pulse 60, with last improvement; no pain in cardiac region, but the swelling had returned in wrists and hands. I persevered with the ten grains every three hours till next day, when I found him cheerful, free from pain, and taking a fair quantity of nourishment. Now I gave up the salicin, being quite satisfied that I had attained my object, and placed him on the usual old treatment for acute rheumatism, on which now (the fifth day) he seems to be making a rapid recovery.

I am most reluctant in jumping at any mode of treatment I see put forward as new; but I am bound to plead guilty to the agreeable impression the salicin treatment has made on me in acute rheumatism, and I hope you will not think my note too long in trying to explain the case as precisely as I could in addition to the number already on record.

Yours &c.,

King's-road, Chelsea, Jan. 1877. HENRY FISHER, M.D.

Inquirer, (Liverpool.)—The efficacy of xanthium spinosum in rabies canina has been the subject of experiment by MM. Trasbot and Nocard in the Alfort Veterinary School. The results are stated to have been of a negative character.

ARMY MEDICAL OFFICERS.

To the Editor of THE LANCET.

SIR,—The Army List, published on Jan. 8th, 1877, issues a circular dated Jan. 1st, 1877. Clause 2 reads: "Medical officers will in future receive staff allowances; but when quartered in barracks will be entitled only to regimental quarters." Thus choice of quarters, all claims for staff quarters, are swept away from army medical officers by a stroke of a pen. Forage has been curtailed; quarters go now. What next? All official quarters are in barracks, as far as I know; so that this new rule deprives all medical officers, not on the lodging list, of their proper quarters, which are freely granted to the Engineers, Commissariat, and every other departmental branch of the service. Mr. Hardy seems to press pretty hardly upon the medical officers.

Your obedient servant,

Jan. 9th, 1877. NEW YEAR.

"THE EFFECT OF PROLONGED MUSCULAR EXERCISE UPON THE URINE IN RELATION TO THE SOURCE OF MUSCULAR POWER."

AN additional paragraph to the concluding portion of Dr. Pavy's articles under the above heading, published in our issue of last week, reached our hands too late for insertion. In that communication Dr. Pavy desired to express his thanks to Mr. Scard, his assistant, for the zeal and ability with which he had performed the analytical work in connexion with the investigation.

A CASE OF HEMORRHAGIC DIATHESIS.

To the Editor of THE LANCET.

SIR,—An uncommon isolated case is always acceptable, not because of its novelty or peculiarity, but more especially on account of the instruction which we may derive from it; for such cases as the following set before us many dangers by which we are beset, and by which we should be well aware, and always bear more or less in mind—firstly, by showing us the probability of something unlooked for taking place, and perhaps accruing from that which we at the time thought to be beneficial, and which may very likely give us a great deal of trouble and annoyance, leaving out of the question the difficulties which we may encounter; secondly, by setting before us the advisability of being prepared for any emergency, for on our readiness and celerity in such cases the lives of our patients entirely depend, for from a very simple act life may be put into jeopardy; and the case of which I am going to give an account is a remarkably good specimen of the kind.

John ——, aged twenty-six, gave the following short history, which, to make more comprehensive and intelligible, I clothe in my own words:—About a fortnight previous to my seeing him he had poisoned his hand by means of a jelly-fish, and had been suffering from the effects of it during that period, without being under treatment of any kind, except what his own crude ideas led him to do; so the poison had ample time, without let or hindrance, to develop itself both locally and generally. When I first saw him he was suffering from a most virulent erysipelatous inflammation of the left arm, which was swollen to twice its original size, was extremely soft, and in some places œdematous, almost of a crimson colour, and accompanied by a corresponding heat. Just above the inner side of the elbow was a large sloughing sore, in probing which I discovered several sinuses running from it in different directions; one especially reached the inner condyle of the humerus, which was deprived of its periosteum; from this one was a continual discharge of thin, ichorous, and offensive fluid, which I can only compare to dirty water. The constitutional symptoms were similar to those with which we have to deal in phlegmonous erysipelas; and what made the case more unpromising was the swollen and indurated condition of the glands in the axilla, which were excessively painful on pressure. On making a most careful examination I could not detect any particular lodgment of pus, so I ordered hot fomentations and poultices, and immediately put him upon a course of iron, which tonic I continued till his return to health. At the end of a week I detected pus just below the elbow, and on making an incision with a lancet I let out about a wineglassful with marked relief to the patient. This incision, somewhat to my surprise, healed very rapidly, and at the same time pus formed again in the exact place as before, which I immediately let out, and after applying a poultice I left him apparently perfectly free from danger. But it was not so; for about three hours after I was called upon to go and see him at once, as, according to the messenger's account, he was bleeding to death. Being four miles from the patient's residence, it took me some time to get there; but on my arrival I did indeed find him bleeding to death, for he was lying extended on his back, his face quite blanched, almost pulseless, extremities cold, and the heart's action feeble. On removing the bandages, poultice, and a quantity of clotted blood, I found that the bleeding had proceeded from the incision made in the morning, and from which blood was still oozing. I immediately plugged it with a strip of lint soaked in strong perchloride of iron, which had the effect I wished for. The usual treatment as regards tonics &c. was pursued, to sustain him against such a loss of blood, and everything was done (such as being kept in the recumbent posture, exposure of the limb to the air, and perfect quietude) to prevent a recurrence of the hæmorrhage. Strange to relate, he now progressed quickly towards recovery; no bleeding occurred again; the sore soon assumed a healthy look, and the arm resumed its proper size and appearance; his appetite became almost voracious, and at the end of a fortnight he was able to go about nearly as well as ever.

The peculiarity of this case is, that comparatively so slight an incision with a common-sized lancet should have set up such an alarming hæmorrhage; for when we take into consideration the situation of the incision, with the arm bent (it was immediately below the olecranon), the result was exceedingly surprising. We well know there is no blood-vessel situated there, though in his case there might have been an abnormal branch. Even supposing it had been so, such a rapid loss of blood could not have resulted from a wound of it. The question now arises, How can we account for it? Could it have occurred by what we call the hæmorrhagic diathesis? Was it caused by a weakness of the capillaries arising from the effects of the poison? Or did it owe its origin to the impurity of the blood, thereby preventing proper coagulation? I hardly think the last two could have set up such a rapid hæmorrhage, and to me it appears to have been mainly due to that constitutional defect called hæmorrhagic diathesis.

Another peculiarity is, that the poison seemed to have been totally eradicated by the bleeding; for from the time of its occurrence the sore commenced to heal, healthy granulations sprang up, the watery discharge ceased, the quality of the pus improved, the swelling of the arm decreased, and it became non-œdematous; all symptoms of erysipelas disappeared, the secretions resumed their ordinary appearance, mobility was restored to the elbow, and all that remained was a slight stiffness and pain in the joint when the limb was extended.

The man when I last saw him was in a vigorous state of health, and complained of nothing except a stiffness of the elbow.

I should not have sent a description of this peculiar case if I had not thought it deserved being recorded in the pages of a journal which is almost universally read, and considered to be the authority of the medical profession.

I am, Sir, yours obediently,

Camberwell-road, Jan. 1877. E. MARLETT BODDY, F.R.C.S., &c.

AXILLARY AIR-PAD.

WE have been favoured with one of Dr. Eddowes' axillary air-pads, a description of which appeared in our columns some time back. The pad, which consists of india-rubber, may be inflated to any size at will. Its utility in the treatment of fractured clavicle is obvious. Messrs. Hooper and Co., Pall-mall East, are the sole proprietors of the apparatus.

D. M.—Yes; price 2s. 6d., carriage free.

THE VACCINE LYMPH FAMINE.

To the Editor of THE LANCET.

SIR,—There appears to be a dearth of vaccine lymph where it is most required to counteract the present outbreak of small-pox. The remedy seems to me to be that which is ever found to be sufficient in cases of famine from whatever cause—namely, to call upon those who are able, from the abundance of their store, to supply the wants of their necessitous brethren. If a depôt for vaccine lymph were opened in London, there must be many hundreds of public vaccinators in the kingdom who would gladly contribute both tubes and points for distribution. I would suggest that this be done, and that capillary tubes and points should be issued, free of charge, to all applicants willing to supply lymph. My own district for public vaccination is but a small one; but I would engage to send up 50 fresh-charged tubes and 100 points next week, and a further supply to follow, if I knew where to send them. In the country we constantly send away arms untouched, simply because we have no need for them; and if the full supply of lymph capable of being secured was stored for the use of others, and distributed as I suggest, we should hear no more of famine.

Yours faithfully,

Kibworth, Leicester, Jan. 1877. THOMAS MACAULAY.

To the Editor of THE LANCET.

SIR,—The obvious way to get an increased supply of vaccine lymph is as follows:—Let the Local Government Board give instructions to public vaccinators who have a weekly average of fifteen or more vaccinations at their station to transmit a regular supply of tubes to the National Vaccination Establishment. The addition thus obtained would be most important. At present only the officers empowered to grant certificates which qualify to hold a vaccination appointment forward lymph to the establishment.

As regards the matter of public vaccinators charging their brethren for tubes, few really contemplate such a step. All they want is a certain amount of gratitude, which is not invariably accorded. It must be admitted, again, that it is annoying to have to provide lymph for men who vaccinate for one shilling per vaccination. Would it be unprofessional to refuse lymph to those who vaccinate for a shilling?

Yours faithfully,

Jan. 1877. MEDIUM-SIZED STATION.

To the Editor of THE LANCET.

SIR,—*Apropos* of your annotation on "The Vaccine Lymph Famine," I beg to mention that a short time after I had been appointed public vaccinator for a large district in South Wales I wrote and offered to send the Local Government Board a supply of tubes and points every week—an offer which, perhaps you will be surprised to hear, they declined. Am I then to blame for disposing of my surplus lymph (after supplying the local medical men) for a remuneration?

Yours obediently,

Jan. 1877. A PUBLIC VACCINATOR.

M. J. P., (Hastings.)—Among the many Atlases of Human Anatomy designed for the student, the best, for all practical purposes, is that of Dr. B. H. Obst (Leipzig, Brockhaus). It is comprehensive, while not overloaded with detail; it is clear, while admirable for its minute accuracy. A short but sufficient sketch of the history of anatomy is prefixed, concluding with an instructive exposition of the stage which the science has reached.

LIQ. ERGOTÆ AMMON.

To the Editor of THE LANCET.

SIR,—I wish to call attention to the liq. ergotæ ammon., as prepared by Martindale, of New Cavendish-street. I have now used it for a considerable period, and find it a more efficient and reliable preparation, as powerful in its action, if not more so, than the fresh infusion prepared from recently powdered ergot; in fact, so powerful is it that great caution must be used in administering it during labour. The advantages to be gained by a really good liquid preparation of ergot are so obvious that I need not further dilate on the merits of this one.

Yours obediently,

Reigate, Jan. 1877. J. WALTERS, M.B., &c.

Mr. James Griffin would find ample material for refuting the rabid doctrines of the persons in question in Dr. Ballard's book on Vaccination, or in the articles on Small-pox and Vaccination in Reynolds's System of Medicine.

"POISONING BY MISADVENTURE."

To the Editor of THE LANCET.

SIR,—With reference to a paragraph in your journal of the 13th inst., I beg to inform you that the valuable precaution adopted recently at King's College Hospital has been satisfactorily carried out at this infirmary for the last ten years.

I am &c.,

East Sussex, Hastings, and St. Leonard's Infirmary, Jan. 14th, 1877. H. M. DUNWELL.

Mr. A. F. Wilson, (Guilsborough.)—Public appointments generally require a double qualification.

Dr. Duncan.—We are unable to state where vaccine lymph direct from the cow or calf can be obtained.

URTICARIA.

To the Editor of THE LANCET.

SIR,—If "A Subscriber" will refer to page 155 of THE LANCET for 1868, he will find particulars of a most obstinate case of chronic urticaria, which was cured by a few frictions with glycerine. In this case the skin was dry and scurfy, and there was almost complete absence of natural perspiration.

Yours obediently,

Jan. 18th, 1877. ANOTHER SUBSCRIBER.

M. O. H. does not state what was the complaint laid before the Board of Governors by the inspector of nuisances, which he was requested to report upon. Until we know the nature of the complaint, we are unable to advise him upon the various facts he relates.

VISITING INFECTIOUS CASES.

To the Editor of THE LANCET.

SIR,—In your remarks lately on the death of a clergyman's wife at Chatham, you gave some useful practical hints to those who have to visit infectious cases. It is to be hoped that medical men will communicate the advice to district visitors and others who devote their time to the welfare of the sick poor. Allow me to add one very simple precaution described by the Rev. Dr. Guthrie, of Edinburgh. He always insisted on the room-door being open during his visit, and took his place between the door and the bed, never between the bed and the chimney. In my student days at Edinburgh the badly-ventilated rooms (more than even the worst parts of London) added greatly to the peril of visiting. In houses far above the poorest there was often a great dislike of fresh air. A physician told me that he once took his old master, Dr. Gregory, to see a case. When Gregory entered the room, his first proceeding was to run his cane through the window, the smashing of the glass giving a lesson on ventilation likely to be remembered, as well as usefully talked about.

I remain, Sir, yours &c.,

Jan. 1877. THE EDITOR OF THE LEISURE HOUR.

COMMUNICATIONS not noticed in the current number will receive attention in our issue of the ensuing week.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. Southey, London; Dr. Pavy, London; Dr. A. Farr; Dr. de H. Hall, London; Dr. McCall Anderson, Glasgow; Mr. Plumbe; Mr. Davis, Boston, U.S.A.; Dr. Fenn, Richmond; Mr. Nelson, Norwood; Dr. Charteris, Glasgow; Mr. Leeds; Mr. Bell; Dr. C. Fox; Mr. Sparrow, Chichester; Dr. Griffin; Mr. Davidson; Mr. J. A. Bright; Dr. Jay, Great Ayton; Mr. W. Stacey, London; Dr. May, Fort Cairns; Mr. H. Taylor, London; Dr. Coats, Mr. Colson; Mr. Thicke, London; Dr. Frodsham, Streatham; Dr. Fisher, Chelsea; Mr. Wilson, Leamington; Mr. Kesteven, Holloway; Mr. Stuart, Musselburgh; Messrs. Carruthers and Son, Inverness; Mr. Magnus, London; Messrs. Bleeck and Leach, Bath; Dr. Whatmough, Cinderford; Mr. T. Chambers, London; Mr. B. Duke, Clapham; Mr. Lobb, Vauxhall; Dr. Solon, Paris; Mr. Fry, Swansea; Dr. J. Smith, Massachusetts, U.S.A.; Dr. Rigg, Burgh-on-Sands; Messrs. Sharp and Co., Glasgow; Mr. Reid, Newcastle; Mr. Somerville, Edinburgh; Mr. Macaulay, Kibworth; Dr. Smart, Haslar; Mr. Owen, London; Mr. Dunwell, Hastings; Dr. O'Neill, Lincoln; Mr. Broome, Snettisham; Mr. Ewens, Bristol; Mr. Pearce, Hammersmith; Mr. Graham, Glasgow; Mr. Lyle, Exeter; Mr. Iugpen, London; Dr. Lattey, Kensington; Mr. Wright, London; Dr. Dudfield, Kensington; Mr. Wright, London; Dr. Glyn, Liverpool; Dr. Bey, Paris; Dr. Dixon, Thames Ditton; Mr. Davies, Thanet; Mr. Steavenson, Westerham; Mr. Agnew, Eccles; Dr. Alexander, Bradford; Dr. Morgan, Cork; Dr. Lediard; Mr. H. B. Clarke; Mr. Lawton, Southport; Mr. Whitford; Mr. Gibbings; Dr. Tennent, Ilkshaw; Archdeacon Vesey, Huntingdon; Dr. Crisp, Chelsea; Mr. Anningson, Cambridge; Mr. Gardner, Hailsham; Mr. Crook, Chepstow; Mr. Watton, Greenwich; Mr. Wood, Horsham; Dr. White, Welwyn; Mr. Somers; Mr. Layton; Mr. Ormond; Dr. Beach; Sir C. Trevelyan; Dr. Alexander, Peantick; Mr. Wilson, Guilsborough; Dr. Beeby, Bromley; Mr. Bridge; Dr. Brookhouse, Deptford; Dr. Finny; The Director-General of the Medical Department of the Navy; Junius; A Senior Student; The Medical Officer of the Local Government Board; The Registrar-General of Edinburgh; A Married Officer; Two Hands; Anxious; The Editor of *Leisure Hour;* Bolo the Duke; Fiat Justitia; J. L.; Another Subscriber: A Constant Subscriber; Amicus; Hilgrove; F. F.; J. H. W.; A Public Vaccinator; D. E. F.; J. M. S.; A. B.; &c.

LETTERS, *each with enclosure*, are also acknowledged from — Mr. Watson, Birkenhead; Dr. Campbell, Bridge of Allan; Mr. Woodcock, Bradford; Mr. Duke, Rugby; Mr. Hinton, Niton; Dr. Sutherland, Castletown; Dr. Appleton, Staines; Mr. Wilson, Stanton Wick; Mr. Warren, Wooburn; Mr. Herbert, Gloucester; Dr. Lowe, King's Lynn; Dr. Lake, Otago; Dr. Duncan, Glasgow; Dr. Bayley, Stourbridge; Dr. Dickson, Buxton; Mr. Kemp, Castleford; Dr. Semple, Oxford; Mrs. Hartshorne, Harborne; Mrs. Gibson, Halifax; Mr. Percy, Liverpool; Dr. Denning, Halifax; Mr. Abby; Mr. Dence; Dr. Hyslop, Shrewsbury; Mr. Evans, Seaford; Mr. Peacock; Dr. Dawson, Stapleford; Mr. Brackley; Dr. Johnstone, Handsworth; Mr. Poynder; Mr. White; Mr. Serry; Mr. Wilkinson; Mr. Wright; Dr. Marsh, Bradford; Dr. Lush; Mr. Wingate, Streathamhill; Mr. Burroughs, Sheffield; Dr. Jackson, Lofthouse; Mr. Barnard; Dr. May, Tottenham; Mr. Thorps, Liskeard; A. B., Bow-road; W. A., Cheltenham; T. H., Barnsley; Spes; W.; L.S.A., Kidderminster; Zeta; T. C. D., Bradford; L.R.C.P., Peckham; A. W., Tonbridge; U., Brecon; Statim; X. Y. Z., Litchurch; M.R.C.S.E., Loutham; Yorkshire; M.D.; Medicus, Cork; M. M., Ventnor; Medicus M. L.; M.D., Oldham; A. W., Bayswater; Beta; Scorrier; J. T. T.; M.R.C.S., Grimsby.

Philadelphia Medical Times, Leeds Mercury, Birmingham Daily Post, Manchester Guardian, Newcastle Daily Chronicle, Western Morning News, Birmingham Daily Gazette, Bolton Chronicle, Medical Record, Croydon Chronicle, Naval and Military Gazette, Sunderland Daily Post, Welchman, Whitehall Review, Land and Water, Examiner, Pharmaceutical Journal, Canada Lancet, Worcester Chronicle, Solicitors' Journal and Reporter, East London Observer, Richmond and Twickenham Times, Surrey Advertiser, Medium and Daybreak, Kentish Express and Ashford News, Garden, Medical Press, Criterion, Broad Arrow, United Service Gazette, Spectator, Sunday Times, and *St. Pancras Gazette* have been received.

Medical Diary for the ensuing Week.

Monday, Jan. 22.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10½ A.M. each day, and at the same hour.
ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1½ P.M. each day and at the same hour.
ST. MARK'S HOSPITAL.—Operations, 9 A.M. and 2 P.M.
METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.
MEDICAL SOCIETY OF LONDON.—8½ P.M. Second Lettsomian Lecture, by Dr. A. Wiltshire, "On Vascular Rhythm as exemplified in Periodical Hæmorrhages, General and Local; and on the Treatment of Hæmorrhages from the Female Generative Organs."

Tuesday, Jan. 23.

GUY'S HOSPITAL.—Operations, 1½ P.M., and on Friday at the same hour.
WESTMINSTER HOSPITAL.—Operations, 2 P.M.
NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
WEST LONDON HOSPITAL.—Operations, 3 P.M.
ROYAL INSTITUTION.—3 P.M. Prof. Garrod, "On the Human Form; its Structure in relation to its Contour."
ROYAL MEDICAL AND CHIRURGICAL SOCIETY. — 8½ P.M. Dr. John Harley, "On a Case of Sclerema Adultorum." — Mr. H. T. Butlin, "On the Minute Anatomy of two Cases of Carcinoma of the Breast, preceded by Eczema of the Nipple and Areola."

Wednesday, Jan. 24.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.
ST. MARY'S HOSPITAL.—Operations, 1½ P.M.
ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
ST. THOMAS'S HOSPITAL.—Operations, 1½ P.M., and on Saturday at the same hour.
KING'S COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at 1½ P.M.
GREAT NORTHERN HOSPITAL.—Operations, 2 P.M.
UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M., and on Saturday at the same hour.
LONDON HOSPITAL.—Operations, 2 P.M.
SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 3½ P.M.
HUNTERIAN SOCIETY.—7½ P.M. Council.—8 P.M. Dr. Galabin, "On the Use of Esmarch's Elastic Constrictor in Amputation of the Cervix Uteri."
ASSOCIATION OF SURGEONS PRACTISING DENTAL SURGERY.—7½ P.M. Council. —8½ P.M. Mr. Edgelow, "On a remarkable Case of Maxillary Disease."—Mr. N. Stevenson, "On Abnormal Hypertrophy of Intermaxillary Bone, and Operation to remedy the defect." — Dr. Orphoot (Edinburgh), "On a new means of Preventing the access of Saliva in Dental Operations." —Mr. H. S. Cartwright, "On a Severe Case of Alveolar Hæmorrhage connected with Jaundice."

Thursday, Jan. 25.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.
CHARING-CROSS HOSPITAL.—Operations, 2 P.M.
ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.
CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.
ROYAL INSTITUTION.—3 P.M. Dr. Wright, "On Metals, and the chief Industrial Uses of these Bodies and their Compounds."

Friday, Jan. 26.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1½ P.M.
ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.
QUEKETT MICROSCOPICAL CLUB.—8 P.M. Ordinary Meeting.
CLINICAL SOCIETY OF LONDON.—8½ P.M. Address by the President. — Mr. Brodhurst: "Cases of Subcutaneous Section of the Neck of the Thigh-bone." — Dr. Greenfield, "On a Case of Hydatid of the Lung."—Mr. Pugin Thornton, "On a Case of Tracheotomy in which the operation was performed three times in a few years."
ROYAL INSTITUTION.—8 P.M. Weekly Meeting.—9 P.M. Sir John Lubbock, Bart., "On Ants."

Saturday, Jan. 27.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.
ROYAL INSTITUTION.—3 P.M. Mr. Ernst Pauer, "On the Nature of Music: the Italian, French, and German Schools" (with Pianoforte Illustrations).

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